



# **STIC Search Report**

## **EIC 2600**

**STIC Database Tracking Number: 134903**

**TO: Lun See Lao**  
**Location: CPK2 8C48**  
**Art Unit: 2643**  
**Wednesday, October 13, 2004**

**Case Serial Number: 09/462355**

**From: Pamela Reynolds**  
**Location: EIC 2600**  
**PK2-3C03**  
**Phone: 306-0255**

**Pamela.Reynolds@uspto.gov**

### **Search Notes**

Dear Lun-See Lao

Please find attached the search results for 09462355. I used the search strategy I emailed to you to edit, not hearing from you I proceeded. I searched the standard Dialog files, IEEE, and the internet.

If you would like a re-focus please let me know.

Thank you.



(2)

Access DB#

134903

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: LUN-SEE LAO Examiner #: 78943 Date: 10/12/04  
 Art Unit: 2643 Phone Number 30 \_\_\_\_\_ Serial Number: 09/462,355  
 Mail Box and Bldg/Room Location: 8C48 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: METHOD AND APPARATUS FOR FORMATTING THE DIGITAL AUDIO SIGNAL FOR USE OF THE SOUND  
 Inventors (please provide full names): PIERRE PICCALUGA, L'ISLED'ABEAU,

Earliest Priority Filing Date: 07/07/1997

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

To reduce the distortion of speaker membrane by doubling the frequency of the signal.  
 See spec, page 1, line 35 - page 2, line 5.

*see attached*

Best Available Copy

## STAFF USE ONLY

|  | Type of Search  | Vendors and cost where applicable                         |
|--|---|---|
| Searcher: <u>Pamela Reynolds</u>         | NA Sequence (#) _____                                   | STN _____   |
| Searcher Phone #: <u>306-0255</u>        | AA Sequence (#) _____                                   | Dialog <input checked="" type="checkbox"/> _____          |
| Searcher Location: <u>PK2303</u>         | Structure (#) _____                                     | Questel/Orbit _____                                       |
| Date Searcher Picked Up: <u>10-13-04</u> | Bibliographic <input checked="" type="checkbox"/> _____ | Dr. Link _____  |
| Date Completed: <u>10-14-04</u>          | Litigation <input checked="" type="checkbox"/> _____    | Lexis/Nexis _____   |
| Searcher Prep & Review Time: <u>1</u>    | Fulltext <input checked="" type="checkbox"/> _____      | Sequence Systems _____                                    |
| Clerical Prep Time: _____                | Patent Family _____                                     | WWW/Internet <input checked="" type="checkbox"/> _____    |
| Online Time: <u>1</u>                    | Other _____   | Other (specify) <input checked="" type="checkbox"/> _____ |

File 344:Chinese Patents Abs Aug 1985-2004/May  
(c) 2004 European Patent Office  
File 347:JAPIO Nov 1976-2004/Jun(Updated 041004)  
(c) 2004 JPO & JAPIO  
File 348:EUROPEAN PATENTS 1978-2004/Oct W01  
(c) 2004 European Patent Office  
File 349:PCT FULLTEXT 1979-2002/UB=20041007,UT=20040930  
(c) 2004 WIPO/Univentio  
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200465  
(c) 2004 Thomson Derwent

| Set | Items | Description                        |
|-----|-------|------------------------------------|
| S1  | 99    | AU=(PICCALUGA, P? OR PICCALUGA P?) |
| S2  | 2     | S1 AND DIGITAL()AUDIO()SIGNAL?     |

2/3,K/1 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01026375

METHOD AND APPARATUS FOR FORMATTING THE DIGITAL AUDIO SIGNAL FOR USE  
OF THE SOUND REPRODUCTION

VERFAHREN UND VORRICHTUNG ZUR FORMATIERUNG VON NUMERISCHEN TONSIGNALEN ZUR  
ANWENDUNG BEI TONWIEDERGABE

PROCEDE ET APPAREIL POUR FORMATER LE SIGNAL AUDIO NUMERIQUE POUR L'USAGE DE  
LA REPRODUCTION SONORE

PATENT ASSIGNEE:

Perrichon, Claude Annie, (1408891), 6, rue des Escoffiers, 38080 L'Isle  
d'Abeau, (FR), (Proprietor designated states: all)

Charbonneaux, Marc, (2490110), 6, rue Dumenge, 69004 Lyon, (FR),  
(Proprietor designated states: all)

Piccaluga, Pierre, (1044613), 6, rue des Escoffiers, 38080 L'Isle d'Abeau  
, (FR), (Proprietor designated states: all)

INVENTOR:

PICCALUGA, Pierre , 6, rue des Escoffiers, F-38080 L'Isle d'Abeau, (FR)

LEGAL REPRESENTATIVE:

Cabinet Hirsch (101611), 34, Rue de Bassano, 75008 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 995336 A1 000426 (Basic)

EP 995336 B1 011219

WO 9903303 990121

APPLICATION (CC, No, Date): EP 98935101 980706; WO 98FR1437 980706

PRIORITY (CC, No, Date): FR 978822 970707

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;

LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: H04R-003/04

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): French; French; French

FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS B                           | (English) | 200151 | 274        |
| CLAIMS B                           | (German)  | 200151 | 259        |
| CLAIMS B                           | (French)  | 200151 | 273        |
| SPEC B                             | (French)  | 200151 | 1307       |
| Total word count - document A      |           |        | 0          |
| Total word count - document B      |           |        | 2113       |
| Total word count - documents A + B |           |        | 2113       |

METHOD AND APPARATUS FOR FORMATTING THE DIGITAL AUDIO SIGNAL FOR USE  
OF THE SOUND REPRODUCTION

INVENTOR:

PICCALUGA, Pierre ...

...CLAIMS B1

1. Method for formatting a digital audio signal for controlling at least one electro-acoustic transducer from an original digital signal, of an...

2/3,K/2 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

012292247 \*\*Image available\*\*  
WPI Acc No: 1999-098353/199909

XRPX Acc No: N99-071652

Digital audio signal formatting method taking transducer characteristics into account - modifying original signal by sampling to produce copies at e.g. four times frequency, then reformatting audio before amplification

Patent Assignee: CHARBONNEAUX M (CHAR-I); PERRICHON C A (PERR-I); PICCALUGA P (PICC-I)

Inventor: PICCALUGA P

Number of Countries: 084 Number of Patents: 015

Patent Family:

| Patent No     | Kind | Date     | Applicat No   | Kind | Date     | Week   |   |
|---------------|------|----------|---------------|------|----------|--------|---|
| FR 2765765    | A1   | 19990108 | FR 978822     | A    | 19970707 | 199909 | B |
| WO 9903303    | A1   | 19990121 | WO 98FR1437   | A    | 19980706 | 199910 |   |
| AU 9884466    | A    | 19990208 | AU 9884466    | A    | 19980706 | 199924 |   |
| NO 200000051  | A    | 20000302 | WO 98FR1437   | A    | 19980706 | 200022 |   |
|               |      |          | NO 200051     | A    | 20000106 |        |   |
| EP 995336     | A1   | 20000426 | EP 98935101   | A    | 19980706 | 200025 |   |
|               |      |          | WO 98FR1437   | A    | 19980706 |        |   |
| CN 1262856    | A    | 20000809 | CN 98807001   | A    | 19980706 | 200055 |   |
| JP 2001510287 | W    | 20010731 | WO 98FR1437   | A    | 19980706 | 200148 |   |
|               |      |          | JP 2000501631 | A    | 19980706 |        |   |
| KR 2001021558 | A    | 20010315 | KR 2000700116 | A    | 20000107 | 200159 |   |
| BR 9815508    | A    | 20011106 | BR 9815508    | A    | 19980706 | 200175 |   |
|               |      |          | WO 98FR1437   | A    | 19980706 |        |   |
| EP 995336     | B1   | 20011219 | EP 98935101   | A    | 19980706 | 200206 |   |
|               |      |          | WO 98FR1437   | A    | 19980706 |        |   |
| DE 69803074   | E    | 20020131 | DE 603074     | A    | 19980706 | 200216 |   |
|               |      |          | EP 98935101   | A    | 19980706 |        |   |
|               |      |          | WO 98FR1437   | A    | 19980706 |        |   |
| ES 2170511    | T3   | 20020801 | EP 98935101   | A    | 19980706 | 200263 |   |
| IL 133898     | A    | 20030112 | IL 133898     | A    | 19980706 | 200317 |   |
| AU 759981     | B    | 20030501 | AU 9884466    | A    | 19980706 | 200339 |   |
| RU 2218674    | C2   | 20031210 | WO 98FR1437   | A    | 19980706 | 200412 |   |
|               |      |          | RU 2000102904 | A    | 19980706 |        |   |

Priority Applications (No Type Date): FR 978822 A 19970707

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

FR 2765765 A1 9 H04R-003/04

WO 9903303 A1 F

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9884466 A Based on patent WO 9903303

NO 200000051 A H04R-000/00

EP 995336 A1 F H04R-003/04 Based on patent WO 9903303

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

CN 1262856 A H04R-003/04

JP 2001510287 W 11 H04R-003/04 Based on patent WO 9903303

KR 2001021558 A G11B-020/12

BR 9815508 A H04R-003/04 Based on patent WO 9903303

EP 995336 B1 F H04R-003/04 Based on patent WO 9903303

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DE 69803074 E H04R-003/04 Based on patent EP 995336

Based on patent WO 9903303

|            |    |             |                                  |
|------------|----|-------------|----------------------------------|
| ES 2170511 | T3 | H04R-003/04 | Based on patent EP 995336        |
| IL 133898  | A  | H04R-003/04 | Based on patent WO 9903303       |
| AU 759981  | B  | H04R-003/04 | Previous Publ. patent AU 9884466 |
|            |    |             | Based on patent WO 9903303       |
| RU 2218674 | C2 | H04R-003/04 | Based on patent WO 9903303       |

Digital audio signal formatting method taking transducer characteristics into account...

Inventor: PICCALUGA P

?

File 2:INSPEC 1969-2004/Oct W1  
(c) 2004 Institution of Electrical Engineers  
File 6:NTIS 1964-2004/Oct W1  
(c) 2004 NTIS, Intl Cpyrght All Rights Res  
File 8:Ei Compendex(R) 1970-2004/Oct W1  
(c) 2004 Elsevier Eng. Info. Inc.  
File 34:SciSearch(R) Cited Ref Sci 1990-2004/Oct W1  
(c) 2004 Inst for Sci Info  
File 35:Dissertation Abs Online 1861-2004/Sep  
(c) 2004 ProQuest Info&Learning  
File 62:SPIN(R) 1975-2004/Aug. W3  
(c) 2004 American Institute of Physics  
File 65:Inside Conferences 1993-2004/Oct W2  
(c) 2004 BLDSC all rts. reserv.  
File 94:JICST-EPlus 1985-2004/Sep W2  
(c)2004 Japan Science and Tech Corp(JST)  
File 95:TEME-Technology & Management 1989-2004/Jun W1  
(c) 2004 FIZ TECHNIK  
File 99:Wilson Appl. Sci & Tech Abs 1983-2004/Sep  
(c) 2004 The HW Wilson Co.  
File 144:Pascal 1973-2004/Oct W1  
(c) 2004 INIST/CNRS  
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info  
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13  
(c) 2002 The Gale Group  
File 603:Newspaper Abstracts 1984-1988  
(c)2001 ProQuest Info&Learning  
File 483:Newspaper Abs Daily 1986-2004/Oct 12  
(c) 2004 ProQuest Info&Learning

| Set | Items  | Description   |
|-----|--------|---|
| S1  | 3003   | (ELECTRO-ACOUSTIC OR ELECTROACOUSTIC) (3N) TRANSDUCER?  |
| S2  | 82309  | SPEAKER OR LOUDSPEAKER? OR (LOUD OR AUDIO) () SPEAKER??   |
| S3  | 1081   | DIGITAL(3N) SOUND?(3N) SIGNAL?  |
| S4  | 1117   | ORIGINAL(3N) SIGNAL? AND (COPIES OR COPIED OR SAMPL?)   |
| S5  | 78     | S1 AND MEMBRANE?  |
| S6  | 693847 | (DOUBL? OR RAIS? OR HEIGHT? OR INCREAS? OR HIGHER) AND FRE-<br>QUENC?   |
| S7  | 4675   | (REDUC? OR COMPENSAT? OR CONTROL? OR MANAG? OR CHANG? OR A-<br>LTER? OR MODIF? OR ADJUST? OR CORRECT? OR MITIGAT?) (3N) (RUNAW-<br>AY? OR TRAIL?()) EFFECT? OR INERTIA) |
| S8  | 28140  | (SOUND OR AUDIO) (3N) (REPRODUC? OR RECORD?)  |
| S9  | 114    | AU=(PICCALUGA, P? OR PICCALUGA P?)  |
| S10 | 61     | FORMAT? AND S3  |
| S11 | 0      | S5 AND S7   |
| S12 | 84     | S4 AND S6   |
| S13 | 0      | S12 AND S7  |
| S14 | 2      | S12 AND S8  |
| S15 | 2      | RD S14 (unique items)   |
| S16 | 2      | S10 AND S6  |
| S17 | 1      | S16 NOT S14   |
| S18 | 0      | S9 AND S1   |
| S19 | 0      | S9 AND S3   |
| S20 | 535    | (S1 OR S2) AND MEMBRANE?  |
| S21 | 51     | S20 AND S6  |
| S22 | 0      | S21 AND S7  |
| S23 | 0      | S21 AND RUNAWAY   |
| S24 | 0      | S21 AND INERTIA   |
| S25 | 0      | S20 AND S4  |
| S26 | 23     | S20 AND S8  |

|     |    |                       |
|-----|----|-----------------------|
| S27 | 23 | S26 NOT (S16 OR S14)  |
| S28 | 18 | S27 NOT PY=1998:2004  |
| S29 | 18 | RD S28 (unique items) |
| S30 | 1  | (S1 OR S2) AND S7     |
| S31 | 0  | S30 NOT ATM           |



15/3,K/1 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

02545918 JICST ACCESSION NUMBER: 95A0421521 FILE SEGMENT: JICST-E  
**Innovative digital filter interpolation provided in Pioneer's CD player and**

**DAT deck. Signal generation and spectrum of legato link conversion S.**

SAWADA SHIGETOSHI (1); YAMADA TOMOYASU (1); NISHIKAWA KAZUO (1)

(1) Pioneer Electron. Corp.

Rajio Gijutsu, 1995, VOL.49,NO.5, PAGE.133-138, FIG.18

JOURNAL NUMBER: F0256AAA

UNIVERSAL DECIMAL CLASSIFICATION: 621.37:534.85

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

...ABSTRACT: hear by estimating signals of 20kHz or over that must have been present before the **sound** is **recorded** onthe disk based on the **sampling** data actually recorded on the disk and adding them to the original data. In addition to 96kHz High- **Sampling** DAT and LLC concept referenced in developing LLCS, interpolative operation of LLCS integrated into one chip and oeration priciple of **higher** harmonic generation circuit are illustrated. The **higher** harmonic generation circuit estimates the **higher** harmonic that is present in the original **sound** before **recording** but not recorded in the CD format based on the original input data, adding it to **original signals** and leading them to D/A converter. Therefore, the output from this LSI can be directly input into general-purpose DA converter for 20-bit input. Comparing the **frequency** characteristics of the original source with those of the signals regnerated by LLCS and.of the signals regenerated by the conventional system, the paper shows that LLCS regenerates very close **signals** to the **original** source.

...DESCRIPTORS: **sound reproduction** ; ...

... **frequency** characteristic

...BROADER DESCRIPTORS: **sound recorder** ;

15/3,K/2 (Item 2 from file: 94)

DIALOG(R)File 94:JICST-EPlus

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01557540 JICST ACCESSION NUMBER: 92A0388763 FILE SEGMENT: JICST-E

**Development of "Legato Link" Conversion.**

YAMADA TOMOYASU (1)

(1) Pioneer Electronic Corp.

Paionia Giho(Pioneer Technical Report), 1992, NO.5, PAGE.39-50, FIG.15,

TBL.1, REF.5

JOURNAL NUMBER: L0992AAH

UNIVERSAL DECIMAL CLASSIFICATION: 621.37:534.85

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

ABSTRACT: We studied the nature of the **signal** prior to **recording** ( **original sound signal** ) and found a significant disparity between the CD player's output waveform and the signal...

...Hence we developed a means applicable to CD player with enables reproduction close to the **original** sounds. The **signal** prior to recording contains an abundant spectrum of **frequency** components exceeding 20kHz though in low level. The nature of signal reveals that it is...

...like waveforms having good transient response in the time axis and amplitude decreases as the **frequency** **increases** , known as the 1/f characteristics, in the **frequencyaxis** . We established a method called "Legato Link" conversion introduced in the D/A system which...

...DESCRIPTORS: **sound** **recording** ; ...

... **sound** **reproduction** ; ...

...signal **sampling** ;

?

17/3,K/1 (Item 1 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

05962111 E.I. No: EIP01526774906

**Title: Multiband approach to Digital Audio FX**

**Author:** Fernandez-Cid, P.; Casajus-Quiros, J.

**Corporate Source:** Universidad Europea de Madrid, 28670 Villaviciosa de Odon, Madrid, Spain

**Conference Title:** 2000 IEEE International Conference on Multimedia and Expo (ICME 2000)

**Conference Location:** New York, NY, United States **Conference Date:** 20000730-20000802

**E.I. Conference No.:** 58780

**Source:** IEEE International Conference on Multi-Media and Expo n III/WEDNESDAY 2000. p 1747-1750 (IEEE cat n 00TH8532)

**Publication Year:** 2000

**Language:** English

**Abstract:** New **formats** for digital audio with enhanced resolution and sampling **frequency** make the limits of traditional approaches to audio effects noticeable. The processes applied during audio production and postproduction for media can be advanced to a **higher** level of quality thanks to a multiband approach to Digital Audio FX. Also completely new... ...DAFX. Benefits of a combined multieffect and multiband design are also addressed, which include an **increase** of quality and new non-previously available effects. 5 Refs.

**Descriptors:** **Digital signal** processing; **Sound** recording; **Signal** to noise ratio; Signal distortion; Waveform analysis; Computer simulation  
?

29/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

5150218 INSPEC Abstract Number: B9602-6450-004

**Title: Space-saving fibre-free absorber for studio acoustics**

Author(s): Zha, X.; Fuchs, H.V.

Author Affiliation: Fraunhofer Inst. of Constr. Phys., Stuttgart, Germany

Journal: ITG-Fachberichte Conference Title: ITG-Fachber. (Germany)

no.133 p.211-16

Publisher: VDE-Verlag,

Publication Date: 1995 Country of Publication: Germany

CODEN: ITGFY ISSN: 0341-0196

SICI: 0341-0196(1995)133L:211:SSFF;1-#

Material Identity Number: M523-95002

Conference Title: Horrundfunk (Audio Broadcasting)

Conference Date: 16-18 May 1995 Conference Location: Mannheim, Germany

Language: German

Subfile: B

Copyright 1996, IEE

Abstract: With modern **audio recording** and **reproduction** equipment working in the entire audible frequency range, room acoustics are of increasing importance, illustrated...

...plot of the transfer function of a 3\*4\*5 m room measured with a **loudspeaker** and microphone in diagonally opposite corners. The properties of film, **membrane**, microporous, and plastic soft foam absorbers and compound-board resonators are compared. Examples are described...

...Descriptors: **audio recording** ; ...

... **membranes** ; ...

... **sound reproduction** ;

...Identifiers: **membrane** absorbers...

... **audio recording** ;

29/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

01221472 INSPEC Abstract Number: B78035245

**Title: Loudspeakers with plane membrane disc. II**

Author(s): Obermayr, K.; Roske, E.

Journal: Funkschau vol.50, no.3 p.104-6

Publication Date: 27 Jan. 1978 Country of Publication: West Germany

CODEN: FUSHA2 ISSN: 0016-2841

Language: German

Subfile: B

**Title: Loudspeakers with plane membrane disc. II**

...Abstract: no.2, p.21 (1978). Discusses transmission properties and results of measurements on the Manger **loudspeaker**. Among its features are low build-up times, low distortion, good reproduction of bass frequencies ...

...Descriptors: **loudspeakers** ; ...

... **sound reproduction**

Identifiers: plane **membrane** disc...

... loudspeaker ;

29/3,K/3 (Item 1 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

02941008 E.I. Monthly No: EI9008093754

**Title:** Sound radiation from circular stretched membranes in free space.  
**Author:** Streng, J. H.  
**Corporate Source:** Philips Research Lab, Eindhoven, Neth  
**Source:** Journal of the Audio Engineering Society v 37 n 3 Mar 1989 p 107-118  
**Publication Year:** 1989  
**CODEN:** ADIOA3 **ISSN:** 0004-7554  
**Language:** English

**Title:** Sound radiation from circular stretched membranes in free space.  
**Abstract:** Some radiation characteristics of circular stretched vibrating membranes are calculated. The calculations include the fluid loading effects of air, which are of essential influence on the membrane's vibrational behavior in the frequency range around  $ka$  equals 1. Results are presented to show that the sound radiation of the most prominent representative of stretched-membrane loudspeakers, namely, the electrostatic push-pull loudspeaker, may be predicted very accurately. The full numerical procedure is supplied in the Appendix. (Author...  
**Descriptors:** MEMBRANES --\*...

...Acoustic Properties; LOUDSPEAKERS --\*...

...Electrostatic Actuation; SOUND REPRODUCTION ; ACOUSTIC TRANSDUCERS  
**Identifiers:** SOUND RADIATION; STRETCHED- MEMBRANE LOUDSPEAKERS ;  
ELECTROSTATIC PUSH-PULL LOUDSPEAKER ; AUDIO TRANSDUCERS

29/3,K/4 (Item 2 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

02705603 E.I. Monthly No: EI8902012564

**Title:** Compact ribbon tweeter/midrange loudspeaker .  
**Author:** Nieuwendijk, J. A. M.  
**Corporate Source:** Philips Consumer Electronics, Eindhoven, Neth  
**Source:** Journal of the Audio Engineering Society v 36 n 10 Oct 1988 p 776-787  
**Publication Year:** 1988  
**CODEN:** ADIOA3 **ISSN:** 0004-7554  
**Language:** English

**Title:** Compact ribbon tweeter/midrange loudspeaker .  
**Abstract:** The differences between ribbon loudspeakers and conventional electrodynamic loudspeakers are outlined. A survey is given of some characteristic properties of modern ribbon tweeters. The...

...principle can be described with the aid of a simple model based on a stretched membrane loaded with an air spring. From the model, design rules can be derived. In this...

**Descriptors:** LOUDSPEAKERS --\*...

...Theory; **SOUND REPRODUCTION ; AUDIO EQUIPMENT**  
Identifiers: COMPACT RIBBON TWEETER; MIDRANGE **LOUDSPEAKER ; RIBBON**  
**LOUDSPEAKERS ; ELECTRODYNAMIC LOUDSPEAKERS**

**29/3,K/5 (Item 1 from file: 94)**  
DIALOG(R)File 94:JICST-EPlus  
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01251459 JICST ACCESSION NUMBER: 91A0027181 FILE SEGMENT: JICST-E  
**Diamond simple substance diaphragm.**  
TANABE KEIICHIRO (1); FUJIMORI SHOJI (1)  
(1) Sumitomo Electric Industries, Ltd.  
New Diamond, 1990, VOL.6,NO.4, PAGE.26-27, FIG.5, TBL.1, REF.1  
JOURNAL NUMBER: X0341AAX ISSN NO: 1340-4792  
UNIVERSAL DECIMAL CLASSIFICATION: 661.66 621.37:534.85  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

...ABSTRACT: diamond. The speed of sound by the vibvating reed method  
exceeds other substance, and the **speaker** can **reproduce** the **sound**  
upto 80,000 Hz. Besides, because the high pass resonant frequency is  
high, the destortionn...  
...DESCRIPTORS: **loudspeaker ;**  
...BROADER DESCRIPTORS: **membrane** and film

**29/3,K/6 (Item 1 from file: 95)**  
DIALOG(R)File 95:TEME-Technology & Management  
(c) 2004 FIZ TECHNIK. All rts. reserv.

01158357 E97110470261  
**Mach doch, was ich will. Electro-Voice X-Array Beschallungs-Anlage**  
Dormann, M  
Workshop, v9, n11, pp19-21, 1997  
Document type: journal article Language: German  
Record type: Abstract

DESCRIPTORS: **LOUDSPEAKERS ; HI FI EQUIPMENT; CONSUMER ELECTRONICS; SOUND**  
**REPRODUCTION ; ACOUSTICS; FINAL AMPLIFIER; NATURAL FREQUENCY; INTERFERENCE**  
**; DECOUPLING; HIGH FREQUENCY; MEMBRANES ; MIXER CONSOLE; COMB FILTERS**

**29/3,K/7 (Item 2 from file: 95)**  
DIALOG(R)File 95:TEME-Technology & Management  
(c) 2004 FIZ TECHNIK. All rts. reserv.

01079923 E97020364214  
**Flacher als ein Brett. NXT-Flachlautsprecher erstmals gehoert**  
(Flat models of **loudspeakers** )  
Baum, HJ  
Sound & Vision, v20, n1, pp34-35, 1997  
Document type: journal article Language: German  
Record type: Abstract

(Flat models of **loudspeakers** )  
DESCRIPTORS: **LOUDSPEAKERS ; SOUND REPRODUCTION ; MEMBRANES^DE VELOPMENT**  
**; DEVELOPMENTAL TREND**

29/3,K/8 (Item 3 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management  
(c) 2004 FIZ TECHNIK. All rts. reserv.

01025434 E96090639278

**Neue Lautsprechergeneration: DDDrive**

Hoven, A

Radio, Fernsehen, Elektronik, v45, n8, pp48-49, 1996

Document type: journal article Language: German

Record type: Abstract

ISSN: 0033-7900

DESCRIPTORS: **LOUDSPEAKERS** ; **SOUND** ; QUALITY IMPROVEMENT; **SOUND REPRODUCTION** ; INNOVATIONS; MAGNETIC MATERIALS; MAGNETIC POWDER; ARTIFICIAL RESIN; INJECTION MOULDING; MAGNETIC FIELD; **MEMBRANES** ; SOUND PRODUCTION

29/3,K/9 (Item 4 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management  
(c) 2004 FIZ TECHNIK. All rts. reserv.

00890352 E95050948233

**Five Live. Fuenf Lautsprecher im Test, Paarpreis zwischen 3000 und 4000 Franken**

(Five Live. Five **loudspeakers** in the test, the price of a set is between 3000 and 4000 Swiss francs)

Schuler, M

Sound, v18, n5-6, pp12-16,18-19, 1995

Document type: journal article Language: German

Record type: Abstract

(Five Live. Five **loudspeakers** in the test, the price of a set is between 3000 and 4000 Swiss francs)

DESCRIPTORS: **SOUND REPRODUCTION** ; ACOUSTIC RECEIVERS; FREQUENCY DEPENDENCE; EFFICIENCY FACTOR; IMPEDANCE; TIMBER OF SOUND; HI FI EQUIPMENT; COST PERFORMANCE; **MEMBRANES** ; ACOUSTIC VARIABLES MEASUREMENT; **LOUDSPEAKERS**

29/3,K/10 (Item 5 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management  
(c) 2004 FIZ TECHNIK. All rts. reserv.

00836105 E94100834220

**Der Biegewellenwandler**

(Novel **loudspeaker** - based on wave transmission line-principle)

Dicks, P

Radio, Fernsehen, Elektronik, v43, n10, pp29-31, 1994

Document type: journal article Language: German

Record type: Abstract

ISSN: 0033-7900

(Novel **loudspeaker** - based on wave transmission line-principle)

**ABSTRACT:**

...eine HiFi-Neuerung im Gespraech: der Biegewellenlautsprecher. Er nutzt die Tatsache aus, dass Biegewellen auf **Membranen** Dispersion aufweisen, d.h. dass die Ausbreitungsgeschwindigkeit von Biegewellen auf **Membranen**

nicht konstant ist, sondern mit zunehmender Frequenz ansteigt. Bei richtiger Dimensionierung des Wandlers (konusfoermig) und...  
DESCRIPTORS: **LOUDSPEAKERS** ; **SOUND REPRODUCTION** ; **ACOUSTIC PRESSURE** ; **TIMBER OF SOUND** ; **FREQUENCY DEPENDENCE** ; **NOISE**...

**29/3,K/11** (Item 6 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management  
(c) 2004 FIZ TECHNIK. All rts. reserv.

00803223 E94081013226

**Der Hornlautsprecher**

(The horn speaker )

Fromme, H

Radio, Fernsehen, Elektronik, v43, n8, pp27-29, 1994

Document type: journal article Language: German

Record type: Abstract

ISSN: 0033-7900

(The horn speaker )

DESCRIPTORS: **LOUDSPEAKERS** ; **AUDIO SIGNALS** ; **DIRECTIONAL CHARACTERISTICS** ; **EFFICIENCY FACTOR** ; **MEMBRANES** ; **ACOUSTIC PRESSURE** ; **ACOUSTIC INTENSITY** ; **EXPONENTIAL FUNCTION** ; **SOUND REPRODUCTION**

**29/3,K/12** (Item 7 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management  
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00770943 E94030723261

**Fuenfzehn auf einen Streich. 15 dynamische Kopfhoerer im Vergleich**

(Comparison of fifteen dynamic headphones)

anonym

Sound, v17, n3, pp4-6,8,10-12, 1994

Document type: journal article Language: German

Record type: Abstract

DESCRIPTORS: **HEAD PHONES** ; **LOUDSPEAKERS** ; **HI FI EQUIPMENT** ; **SOUND REPRODUCTION** ; **MEMBRANES** ; **ELECTRIC WAVE FILTERS** ; **RESONATORS** ; **HEARING**...

**29/3,K/13** (Item 8 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management  
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00770942 E94030724261

**Auf den Punkt gebracht. Lautsprecher Tannoy D 100 im Test**

(The new Tannoy D 100 speakers)

Freund, M

Sound, v17, n3, pp24-26, 1994

Document type: journal article Language: German

Record type: Abstract

DESCRIPTORS: **LOUDSPEAKERS** ; **HI FI EQUIPMENT** ; **ELECTRIC WAVE FILTERS** ; **FREQUENCY DEPENDENCE** ; **SOUND REPRODUCTION** ; **SOUND** ; **MEMBRANES** ; **DIRECTIONAL CHARACTERISTICS** ; **ADMITTANCE** ; **NOISE**...

**29/3,K/14** (Item 9 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management



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00770938 E94030726261

**Gluecksfall(e). Sieben 2-Weg-Komponenten-Lautsprechersysteme im Vergleich**

(Seven car audio two-way component speakers in comparison)

Flammer, T

Sound, v17, n3, pp30-32,34 (Sound/Autotechnik), 1994

Document type: journal article Language: German

Record type: Abstract

DESCRIPTORS: HI FI EQUIPMENT; **LOUDSPEAKERS** ; FREQUENCY DEPENDENCE; **SOUND REPRODUCTION** ; **MEMBRANES** ; **SOUND** ; ADMITTANCE; ELECTRIC WAVE FILTERS; NOISE...

29/3,K/15 (Item 10 from file: 95)

DIALOG(R)File 95:TEME-Technology & Management

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00727906 E93100625266

**Schallender Wuerfel erzeugt bit fuer bit reinen Klang. Forschungsprojekt an der Technischen Fachhochschule Berlin beseitigt bisherige Probleme. Neuer digitaler Lautsprecher entwickelt**

John, KJ

VDI-Nachrichten, v47, n40, pp22, 1993

Document type: Short journal article Language: German

Record type: Abstract

ISSN: 0042-1758

ABSTRACT:

...Mitte je einen elektrodynamischen Lautsprecher haben und eine Flaeche als Schallaustrittsoeffnung dient. Jede der 16 **Membranen** kann nur einen definierten Weg zuruecklegen und sich dabei in einem von 3 Zustaenden befinden...

DESCRIPTORS: **LOUDSPEAKERS** ; **SOUND REPRODUCTION** ; **HI FI EQUIPMENT**; DIGITAL SIGNALS; DIGITAL ANALOGUE CONVERSION; COMPUTERISED SIGNAL PROCESSING; PROTOTYPES; ELECTROACOUSTICS; DEVICE DESCRIPTION...

29/3,K/16 (Item 11 from file: 95)

DIALOG(R)File 95:TEME-Technology & Management

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00695343 I93046365928

**Titel japanisch**

(Stromstatus von Flachlautsprechern)

(Current status of the flat panel **loudspeakers** development)

Satoh, K

Matsushita Electric Industrial Co. Ltd., Kadoma, Japan

Journal of the Institute of Electronics, Information and Communication

Engineers, v75, n10, pp1042-1046, 1992

Document type: journal article Language: Japanese

Record type: Abstract

ISSN: 0913-5693

(Current status of the flat panel **loudspeakers** development)

ABSTRACT:

...projector for development of home theaters, there has been an increasing demand for multi-channel **sound reproduction** systems with high-quality

sound and feeling of presence. In order to realize this, it...

...of flat panel speakers and the recent related technologies. As a large-area vibration panel **speaker** to enable low-frequency **sound reproduction**, the author introduces the AFP **speaker** which is a combination of a large area vibration panel and thin-type cabinet.

DESCRIPTORS: **LOUDSPEAKERS** ; **SOUND REPRODUCTION** ; **MULTICHANNEL TRANSMISSION**; **MEMBRANES** ; THIN FILM TECHNOLOGY; PLAYBACK; BROADBAND TRANSMISSION; FREQUENCY SPECTRUM

IDENTIFIERS: FLAT PANEL **LOUDSPEAKERS** ; MULTI CHANNEL **SOUND REPRODUCTION SYSTEMS**; LARGE AREA VIBRATION PANEL **SPEAKER** ; LOW FREQUENCY **SOUND REPRODUCTION** ; AFP **SPEAKER** ; Flachlautsprecher; Stromstatus

29/3,K/17 (Item 1 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2004 INIST/CNRS. All rts. reserv.

03875072 PASCAL No.: 75-0006087  
**SERVOMECANISMO ELECTRONICO PARA ALTAVOZ.**  
**(SERVOMECANISME ELECTRONIQUE POUR HAUT-PARLEUR)**  
SEBASTIAN J; JAEGER D  
PHILIPS, FLERS, FRANCE  
Journal: REV. ACUST., 1973, 4 (4) 178-181  
Language: SPANISH

REALISATION D'UN SYSTEME CONSTITUE D'UN ACCELERATEUR PIEZOELECTRIQUE SOLIDAIRE DE LA **MEMBRANE** DU HAUT-PARLEUR ET PERMETTANT D'AUGMENTER LA FIDELITE AUX BASSES FREQUENCES ET DE DIMINUER...

English Descriptors: **ELECTRONIC EQUIPMENT**; **LOUDSPEAKER** ; **HIGH FIDELITY REPRODUCTION** ; **SOUND REPRODUCTION**

29/3,K/18 (Item 2 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2004 INIST/CNRS. All rts. reserv.

00391775 PASCAL No.: 74-0004249  
**LAUTSPRECHERBOXEN MIT BEWEGUNGSGEGENKOPPLUNG**  
**(BOITE A HAUT-PARLEURS AVEC ASSERVISSEMENT DU MOUVEMENT)**  
ROTH W  
Journal: FERNSEH-U. KINO-TECH., 1973, 27 (8) 271-273  
Language: GERMAN Summary Language: ENGLISH; FRENCH; SPANISH

BOITE A HAUT-PARLEURS HI-FI. LE MOUVEMENT DE LA **MEMBRANE** EST INTEGRE AU CIRCUIT DE CONTRE-REACTION DE L'AMPLIFICATEUR

English Descriptors: **LOW FREQUENCY AMPLIFIER**; **FEEDBACK SYSTEM**; **SOUND RECORDING** ; **LOUDSPEAKER** ; **HIGH FIDELITY REPRODUCTION** ; **SOUND REPRODUCTION**

?

File 344:Chinese Patents Abs Aug 1985-2004/May  
(c) 2004 European Patent Office  
File 347:JAPIO Nov 1976-2004/Jun(Updated 041004)  
(c) 2004 JPO & JAPIO  
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200465  
(c) 2004 Thomson Derwent

| Set | Items  | Description  |
|-----|--------|--|
| S1  | 3038   | (ELECTRO-ACOUSTIC OR ELECTROACOUSTIC) (3N) TRANSDUCER?   |
| S2  | 83855  | SPEAKER OR LOUDSPEAKER? OR (LOUD OR AUDIO) ( ) SPEAKER??   |
| S3  | 2347   | DIGITAL (3N) SOUND? (3N) SIGNAL?   |
| S4  | 1591   | ORIGINAL (3N) SIGNAL? AND (COPIES OR COPIED OR SAMPL?)   |
| S5  | 185    | S1 AND MEMBRANE?   |
| S6  | 162681 | (DOUBL? OR RAIS? OR HEIGHT? OR INCREAS? OR HIGHER) AND FRE-<br>QUENC?  |
| S7  | 5366   | (REDUC? OR COMPENSAT? OR CONTROL? OR MANAG? OR CHANG? OR A-<br>LTER? OR MODIF? OR ADJUST? OR CORRECT? OR MITIGAT?) (3N) (RUNAW-<br>AY? OR TRAIL? ( ) EFFECT? OR INERTIA) |
| S8  | 40129  | (SOUND OR AUDIO) (3N) (REPRODUC? OR RECORD?)   |
| S9  | 47     | AU=(PICCALUGA, P? OR PICCALUGA P?)   |
| S10 | 102    | FORMAT? AND S3   |
| S11 | 73757  | IC=H04R?   |
| S12 | 0      | S10 AND S7   |
| S13 | 12     | (S1 OR S2) AND S7  |
| S14 | 0      | S13 AND S6   |
| S15 | 10     | S13 AND S11  |
| S16 | 7      | S15 NOT AD=19970707:20041013/PR  |
| S17 | 7      | S15 NOT AD=20001015:20041013/PR  |
| S18 | 0      | S15 NOT (S15 OR S17)   |
| S19 | 0      | S8 AND S5 AND S6   |
| S20 | 2698   | S6 AND (S1 OR S2)  |
| S21 | 63     | S20 AND MEMBRANE?  |
| S22 | 0      | S21 AND S7   |
| S23 | 56     | S21 AND S11  |
| S24 | 9      | S23 AND S8   |
| S25 | 9      | S24 NOT S15  |
| S26 | 0      | S25 AND AD=19970707:19981231/PR  |
| S27 | 2      | S25 AND AD=19990101:20011231/PR  |
| S28 | 1      | S25 AND AD=20020101:20041013/PR  |
| S29 | 6      | S25 NOT (S27 OR S28)   |
| S30 | 0      | S20 AND S7   |
| S31 | 0      | S5 AND S7  |

15/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2004 JPO & JAPIO. All rts. reserv.

07506075 \*\*Image available\*\*  
ECCENTRIC **SPEAKER**

PUB. NO.: 2002-374595 [JP 2002374595 A]  
PUBLISHED: December 26, 2002 (20021226)  
INVENTOR(s): MAE YUTAKA  
APPLICANT(s): MINEBEA CO LTD  
APPL. NO.: 2001-181620 [JP 2001181620]  
FILED: June 15, 2001 (20010615)

ECCENTRIC **SPEAKER**

INTL CLASS: H04R-009/02 ; H04R-001/24 ; H04R-009/06

ABSTRACT

PROBLEM TO BE SOLVED: To provide an eccentric **speaker** that adopts a very simple and easy means of ununiformizing the magnetic flux density in...

... as to cancel unbalanced moment of inertia caused by a biased center hole.

SOLUTION: The **speaker** comprises; the magnetic circuit comprising a top plate 2 and a magnet and a yoke...

...and the top plate 2 is increased so as to ununiformize the magnetic flux thereby **correcting** unbalanced moment of **inertia** .

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15/3,K/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06213628 \*\*Image available\*\*  
ECCENTRIC CONE FOR **LOUDSPEAKER** , ITS MANUFACTURE AND ECCENTRIC **LOUDSPEAKER** INTEGRATED WITH ECCENTRIC CONE

PUB. NO.: 11-155189 [JP 11155189 A]  
PUBLISHED: June 08, 1999 (19990608)  
INVENTOR(s): KITAIWA KIMHIKO  
TANAKA YOSHIYUKI  
GOMI KAZUO  
HAYASHI TOMOHARU  
APPLICANT(s): VICTOR CO OF JAPAN LTD  
APPL. NO.: 09-337800 [JP 97337800]  
FILED: November 21, 1997 (19971121)

ECCENTRIC CONE FOR **LOUDSPEAKER** , ITS MANUFACTURE AND ECCENTRIC **LOUDSPEAKER** INTEGRATED WITH ECCENTRIC CONE

INTL CLASS: H04R-007/12 ; H04R-001/20 ; H04R-007/18 ; H04R-031/00

ABSTRACT

PROBLEM TO BE SOLVED: To prevent the occurrence of abnormal sound or the like by **correcting** unbalanced moment of **inertia** of an eccentric cone or a **loudspeaker** for preventing lateral fluctuations.

SOLUTION: An eccentric cone 100 whose center hole 100a is placed with eccentricity is used as an integral part of a **speaker**. A metal-made balancer 100d is provided at an outer circumferential part of the cone...

15/3,K/3 (Item 3 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2004 JPO & JAPIO. All rts. reserv.

01482099 \*\*Image available\*\*  
PLANE DRIVING TYPE **SPEAKER**

PUB. NO.: 59-193699 [JP 59193699 A]  
PUBLISHED: November 02, 1984 (19841102)  
INVENTOR(s): AZUMA MANABU  
APPLICANT(s): NILES PARTS CO LTD [329433] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 58-069009 [JP 8369009]  
FILED: April 18, 1983 (19830418)  
JOURNAL: Section: E, Section No. 301, Vol. 09, No. 53, Pg. 120, March 07, 1985 (19850307)

PLANE DRIVING TYPE **SPEAKER**

INTL CLASS: H04R-009/00 ; H04R-007/12 ; H04R-009/06

#### ABSTRACT

PURPOSE: To put a diaphragm in piston motion with stable **inertia control** and improve the exchange efficiency of a **speaker** by interlinking all driving conductors with magnetic flux and increasing driving force, and holding the...

...CONSTITUTION: The magnet element 1 of a plane driving type **speaker** is constituted by clamping both flanks of a rectangular rod magnet 11 by inversely-L...

... in the gap magnetic field, and the diaphragm is put in piston motion with stable **inertia control**, improving the exchange efficiency of the **speaker**.

15/3,K/4 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

015854821 \*\*Image available\*\*  
WPI Acc No: 2004-012653/200401  
XRPX Acc No: N04-009290

**Electromechanical force transducer for acoustic device e.g. loudspeaker**, has piezoelectric beam attached to support unit that is of restraining nature in relation to bending wave vibration of beam

Patent Assignee: NEW TRANSDUCERS LTD (NEWT-N)

Inventor: BANK G; HARRIS N

Number of Countries: 102 Number of Patents: 002

Patent Family:

| Patent No     | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|---------------|------|----------|---------------|------|----------|----------|
| WO 200398964  | A2   | 20031127 | WO 2003GB1857 | A    | 20030430 | 200401 B |
| AU 2003229963 | A1   | 20031202 | AU 2003229963 | A    | 20030430 | 200442   |

Priority Applications (No Type Date): GB 200211508 A 20020520

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200398964 A2 E 27 H04R-000/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN  
YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB  
GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ  
UG ZM ZW

AU 2003229963 A1 H04R-000/00 Based on patent WO 200398964

**Electromechanical force transducer for acoustic device e.g. loudspeaker**  
**, has piezoelectric beam attached to support unit that is of restraining**  
**nature in relation to...**

Abstract (Basic):

Used for acoustic device e.g. **loudspeaker** and microphone...

...the support unit restricts the movement of the free ends of the  
piezoelectric beam, thereby **reducing** the **inertia** and thus  
increasing the resistance to shock and drop impacts...

...Title Terms: **LOUDSPEAKER** ;

International Patent Class (Main): **H04R-000/00**

15/3,K/5 (Item 2 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014971697 \*\*Image available\*\*

WPI Acc No: 2003-032211/200303

XRPX Acc No: N03-025493

**Audio applications acoustic transducers having motor providing modulated**  
**electromagnetic flux driving free calibrated weight with acoustic phase**  
**offsets countering mechanical inertia providing correct medium/low**  
**frequency output.**

Patent Assignee: LECOQ P (LECO-I); PERRICHON C A (PERR-I); PICCALUGA P  
(PICC-I)

Inventor: LECOQ P; PERRICHON C A; PICCALUGA P

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| FR 2822631 | A1   | 20020927 | FR 20013745 | A    | 20010320 | 200303 B |

Priority Applications (No Type Date): FR 20013745 A 20010320

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

FR 2822631 A1 8 H04R-011/02

... **motor providing modulated electromagnetic flux driving free calibrated**  
**weight with acoustic phase offsets countering mechanical inertia**  
**providing correct medium/low frequency output.**

Abstract (Basic):

... feed (9). The calibrated weight is tuned so that the acoustic  
phase offsets the mechanical **inertia** creating the **correct** sound  
density for medium frequency harmonics and low frequency filtering.

... **Electroacoustic transducers** for audio applications

International Patent Class (Main): **H04R-011/02**

15/3,K/6 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010107473

WPI Acc No: 1995-008726/199502

XRPX Acc No: N95-007279

Loudspeaker with anti-vibration structure - has weights on either top of loudspeaker or below loudspeaker so that undesirable vibrations generated by loudspeaker assembly are reduced by inertia of weights

Patent Assignee: DAVY A (DAVY-I)

Inventor: DAVY A

Number of Countries: 001 Number of Patents: 002

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| GB 2278974 | A    | 19941214 | GB 9311839  | A    | 19930608 | 199502 B |
| GB 2278974 | B    | 19970716 | GB 9311839  | A    | 19930608 | 199731   |

Priority Applications (No Type Date): GB 9311839 A 19930608

Patent Details:

| Patent No  | Kind | Lan | Pg | Main IPC | Filing Notes |
|------------|------|-----|----|----------|--------------|
| GB 2278974 | A    |     | 8  |          |              |

- Loudspeaker with anti-vibration structure...
- ...has weights on either top of loudspeaker or below loudspeaker so that undesirable vibrations generated by loudspeaker assembly are reduced by inertia of weights
- ...Abstract (Basic): The rectangular box shaped **loudspeaker** is provided, on top of the box, with a weight which has a recess on its underside which fits neatly over the top of the **loudspeaker** so that the **speaker** is firmly held within the recess. The thickness of the weight may be several inches...
- ...and the top of the weight may be decorated to suit the appearance of the **loudspeaker**. In the case of a commercial installation the weight may be used to provide a...
- ...The **loudspeaker** may also be provided, on its underside, with another weight which may be similar to the weight on top of the **loudspeaker** but inverted so that the recess is uppermost to provide a location for the base of the **loudspeaker**. The weight underneath the **loudspeaker** may also be provided with fixing points for attaching to a stand. The weights used...
- ...stepped recesses so that one design of weight can be used on a range of **loudspeakers** so reducing the number of weights needed to be held in stock by a shopkeeper...
- ...USE/ADVANTAGE - Detachable anti-vibration control for **loudspeaker**. Enhances acoustic characteristics...
- ...Abstract (Equivalent): A **loudspeaker** is provided with a discrete and massive weight or 2 discrete and massive weights which substantially increase the mass of the **loudspeaker** so that the undesirable vibration of the **loudspeaker** enclosure is significantly reduced by the **inertia** of the weight or weights which are applied at the top or bottom or at both top and bottom of the **loudspeaker** enclosure and tightly restrained in place...

Title Terms: **LOUDSPEAKER** ;  
International Patent Class (Main): **H04R-001/02**  
International Patent Class (Additional): **H04R-001/28**

**15/3,K/7** (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

002321989

WPI Acc No: 1980-C8423C/198013

**Hi-Fi loudspeaker having convex diaphragm - rigidly secured to  
loudspeaker coil former and flexibly secured to outer annular pole piece**

Patent Assignee: AUDAX (AUDAX-N)

Inventor: GLAVA M

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date | Week     |
|------------|------|----------|-------------|------|------|----------|
| FR 2428952 | A    | 19800215 |             |      |      | 198013 B |

Priority Applications (No Type Date): FR 789785 A 19780403

**Hi-Fi loudspeaker having convex diaphragm...**

**...rigidly secured to loudspeaker coil former and flexibly secured to  
outer annular pole piece**

...Abstract (Basic): The **loudspeaker** comprises a convex cellulose or  
plastics membrane (1) secured about its centre to one end of a  
cardboard or aluminium former (6) for a coil (7). The **loudspeaker** has  
an annular outer pole piece (3) and a central pole piece (4) separated  
by...

...The membrane (1) may be hemispherical, a truncated cone, conical or  
ellipsoidal. This type of **loudspeaker** has **reduced** resonance and  
**reduced inertia** of the moving parts to reduce linear and harmonic  
distortion of reproduced sound.

...Title Terms: **LOUDSPEAKER** ;

International Patent Class (Additional): **H04R-007/16** ...

... **H04R-009/06**

**15/3,K/8** (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

002168591

WPI Acc No: 1979-J8538B/197942

**Plasma control system for inertia -less loudspeaker - uses heated  
gas or electric field to apply thermal energy to plasma to produce  
thermal and density gradients**

Patent Assignee: HILL A E (HILL-I); MILL A E (MILL-I)

Inventor: HILL A E

Number of Countries: 006 Number of Patents: 008

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date | Week     |
|------------|------|----------|-------------|------|------|----------|
| DE 2913804 | A    | 19791011 |             |      |      | 197942 B |
| GB 2023373 | A    | 19791228 |             |      |      | 198001   |
| FR 2422314 | A    | 19791207 |             |      |      | 198004   |



|            |   |          |            |   |                 |
|------------|---|----------|------------|---|-----------------|
| US 4219705 | A | 19800826 |            |   | 198037          |
| GB 2023373 | B | 19830209 |            |   | 198306          |
| CA 1146258 | A | 19830510 |            |   | 198321          |
| DE 2913804 | C | 19860327 |            |   | 198614          |
| JP 2198300 | A | 19900806 | JP 7941472 | A | 19790403 199037 |

Priority Applications (No Type Date): US 78893667 A 19780405

**Plasma control system for inertia-less loudspeaker -**

...Title Terms: **LOUDSPEAKER** ;

...International Patent Class (Additional): **H04R-023/00**

**15/3,K/9 (Item 6 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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001289111

WPI Acc No: 1975-H3022W/197528

**Electrostatic loudspeaker with cylinder sect electrode assembly - has parallel curved electrodes to alter diaphragm energised area**

Patent Assignee: LINDENBERG T (LIND-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date | Week     |
|------------|------|----------|-------------|------|------|----------|
| US 3892927 | A    | 19750701 |             |      |      | 197528 B |

Priority Applications (No Type Date): US 73393789 A 19730904

**Electrostatic loudspeaker with cylinder sect electrode assembly...**

...Abstract (Basic): The single diaphragm electrostatic **loudspeaker** has multiple opposing pairs of electrodes which are graded in size, the **speaker** furthe including means for electrically controlling the high frequency response of each electrode pair so...

...adjacent electrode. The diaphragm is acoustically damped and selectively tuned by mass loading to achieve **inertia control** below a designated frequency, thus extending the **loudspeaker** 's useful response into the low frequency range. The construction for the **loudspeaker** provides for relatively uniform sound dispersion.

...Title Terms: **LOUDSPEAKER** ;

International Patent Class (Additional): **H04R-019/02**

**15/3,K/10 (Item 7 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

001266050

WPI Acc No: 1975-E9944W/197519

**Tremolo effect producing device - is for electronic musical instrument with cabinet of sound absorbing material**

Patent Assignee: HAMMOND CORP (HAMM-N)

Number of Countries: 006 Number of Patents: 006

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date | Week     |
|------------|------|----------|-------------|------|------|----------|
| DE 2450940 | A    | 19750430 |             |      |      | 197519 B |
| NL 7413789 | A    | 19750502 |             |      |      | 197520   |
| US 3905447 | A    | 19750916 |             |      |      | 197539   |
| ZA 7406066 | A    | 19750821 |             |      |      | 197542   |

CA 1005263      A    19770215  
IT 1022652      B    19780420

197710  
197830

Priority Applications (No Type Date): US 73410512 A 19731029

...Abstract (Basic): a central axis and a sound transmitting opening at a distance from the axis; A **loudspeaker** is arranged to rotate about the central axis and there is a **loudspeaker** diaphragm at the above opening; There is a driving system for the diaphragm with a...  
...element between the excitation coil and the diaphragm, rigid in the longitudinal direction, which appreciably **reduces** the moment of **inertia** of the tremolo effect generator so that it can be quickly accelerated and braked; the...

...inside the cabinet, intersecting its central axis; It has a front rib to hold the **loudspeaker** diaphragm at the above opening, and a middle rib for the driving system support, and...

...International Patent Class (Additional): H04R-001/34 ...

... H04R-009/06

?

29/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010238031 \*\*Image available\*\*  
WPI Acc No: 1995-139288/199518  
Related WPI Acc No: 1998-495176  
XRAM Acc No: C95-064304  
XRPX Acc No: N95-109501

**Mid-range frequency piezoelectric loudspeaker - which uses a dome-shaped piezoelectric actuator to drive a speaker membrane directly.**

Patent Assignee: NASA US NAT AERO & SPACE ADMIN (USAS )  
Inventor: HELLBAUM R F; JALINK A; REGAN C R; ROHRBACH W W  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

| Patent No   | Kind | Date     | Applicat No | Kind | Date     | Week     |
|-------------|------|----------|-------------|------|----------|----------|
| US N8326804 | N    | 19950315 | US 94326804 | A    | 19941011 | 199518 B |

Priority Applications (No Type Date): US 94326804 A 19941011  
Patent Details:

| Patent No   | Kind | Lan Pg | Main IPC    | Filing Notes |
|-------------|------|--------|-------------|--------------|
| US N8326804 | N    | 14     | H04R-000/00 |              |

**Mid-range frequency piezoelectric loudspeaker - ...**

**...which uses a dome-shaped piezoelectric actuator to drive a speaker membrane directly.**

**...Abstract (Basic): A piezoelectric loudspeaker suitable for mid-range frequencies uses a dome-shaped piezoelectric actuator to drive a speaker membrane directly. The dome-shaped actuator is made from a reduced and internally biased oxygen wafer...**

**...the rim of the dome-shaped actuator must be free to rock when the dome height varies to ensure low distortion in the loudspeaker . This is achieved by mounting the rim of the dome-shaped actuator on a support surface by prestress only. An exceptionally simple design uses a planar speaker membrane with the centre part of one side pressed against the rim of a dome-shaped...**

**...USE - Piezoelectric loudspeakers for sound reproduction , e.g. for use as direct coupled mid-range driver...**

**...A piezoelectric loudspeaker suitable for mid-range frequencies uses a dome-shaped piezoelectric actuator to drive a speaker membrane directly. The dome-shaped actuator is made from a reduced and internally biased oxygen wafer...**

**...the rim of the dome-shaped actuator must be free to rock when the dome height varies to ensure low distortion in the loudspeaker . This is achieved by mounting the rim of the dome-shaped actuator on a support surface by prestress only. An exceptionally simple design uses a planar speaker membrane with the centre part of one side pressed against the rim of a dome-shaped...**

**...USE - Piezoelectric loudspeakers for sound reproduction , e.g. for use as direct coupled mid-range driver...**

**...A piezoelectric loudspeaker suitable for mid-range frequencies uses a dome-shaped piezoelectric actuator to drive a speaker membrane directly. The dome-shaped actuator is made from a reduced and internally biased oxygen wafer...**

...the rim of the dome-shaped actuator must be free to rock when the dome **height** varies to ensure low distortion in the **loudspeaker**. This is achieved by mounting the rim of the dome-shaped actuator on a support surface by prestress only. An exceptionally simple design uses a planar **speaker membrane** with the centre part of one side pressed against the rim of a dome-shaped...

...USE - Piezoelectric **loudspeakers** for **sound reproduction**, e.g. for use as direct coupled mid-range driver...

...Title Terms: **FREQUENCY** ;

International Patent Class (Main): **H04R-000/00**

**29/3,K/2** (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009203908 \*\*Image available\*\*

WPI Acc No: 1992-331340/199240

Related WPI Acc No: 1990-224300

XRPX Acc No: N92-253127

**Planar diaphragm electromagnetic loudspeaker structure - comprises multiple layers of thin flexible membrane material, each contg. thin electrical conductor in preset pattern**

Patent Assignee: BRUNEY P F (BRUN-I)

Inventor: BRUNEY P F

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| US 5148493 | A    | 19920915 | US 88245915 | A    | 19880919 | 199240 B |
|            |      |          | US 90482801 | A    | 19900221 |          |

Priority Applications (No Type Date): US 88245915 A 19880919; US 90482801 A 19900221

Patent Details:

| Patent No  | Kind | Lan Pg | Main IPC    | Filing Notes                   |
|------------|------|--------|-------------|--------------------------------|
| US 5148493 | A    | 11     | H04R-025/00 | Div ex application US 88245915 |
|            |      |        |             | Div ex patent US 4939784       |

**Planar diaphragm electromagnetic loudspeaker structure...**

...comprises multiple layers of thin flexible membrane material, each contg. thin electrical conductor in preset pattern

...Abstract (Basic): A dipole **loudspeaker** incldues a rigid support containing an opening and a planar multi-layered flexible diaphragm mounted...

...support and extending across the opening. The diaphragm is formed of layers of thin flexible **membrane** material, each of the layers having a different **height** and containing a thin electrical conductor arranged in a predetermined pattern on one surface. The conductor patterns on each of the **membranes** have different masses. The **membrane** defines along its **height** areas of various thickness and varying mass...

...The **membrane** is suitable for more accurately reproducing or generating high and low **frequencies** when the electrical conductors are connected with a source of sound signal currents. Magnets are mounted in spaced relation opposite at least one surface of the **membrane** to **reproduce** the **sound** in response to the sound signal currents through the

conductor. The **membrane** and support are also designed to provide directionality and an accurate three-dimensional image of...

...USE/ADVANTAGE - Dipole **loudspeaker** capable of three-dimensional audio imaging...

...Title Terms: **LOUDSPEAKER** ;

International Patent Class (Main): **H04R-025/00**

**29/3,K/3** (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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008337299

WPI Acc No: 1990-224300/199029

Related WPI Acc No: 1992-331340

XRPX Acc No: N90-174022

**Planar diaphragm dipole loudspeaker - has series of magnets opposite membrane surface for providing vibration in response to signal currents**

Patent Assignee: BRUNEY P F (BRUN-I)

Inventor: BRUNEY P P

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| US 4939784 | A    | 19900703 | US 88245915 | A    | 19880919 | 199029 B |

Priority Applications (No Type Date): US 88245915 A 19880919

**Planar diaphragm dipole loudspeaker - ...**

**...has series of magnets opposite membrane surface for providing vibration in response to signal currents**

...Abstract (Basic): The diaphragm is formed of a series of layers of thin flexible **membrane** material, each of the layers having a different **height** and containing a thin electrical conductor arranged in a predetermined pattern on one surface. The conductor patterns on each of the **membranes** have different masses. The **membrane** defines along its **height** areas of various thickness and varying mass. The **membrane** is suitable for more accurately reproducing or generating high and low **frequencies** when the electrical conductors are connected with a source of sound signal currents...

...Magnets are mounted in spaced relation opposite at least one surface of the **membrane** and the conductor patterns for vibrating the **membrane** to **reproduce** the **sound** in response to the sound signal currents through the conductor. A flexible connection is provided between the **membrane** and the support along at least one side edge at the lower portion to provide lateral flexing of the **membrane** side edges while maintaining the edges in the plane of the diaphragm...

...USE - **Loudspeaker** structure providing good low **frequency** response and three dimensional imaging at **frequencies** about 1400 Hz. (12pp Dwg.No. 1/6)

...Title Terms: **LOUDSPEAKER** ;

International Patent Class (Additional): **H04R-007/06** ...

... **H04R-009/04**

**29/3,K/4** (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

007451683      \*\*Image available\*\*

WPI Acc No: 1988-085617/198813

XRPX Acc No: N88-064645

**Loudspeaker with foil diaphragm - has grooves on opposite frame edges  
for series-connected piezoelectric elements to increase frequency  
range**

Patent Assignee: SAMSUNG ELECTRO MEC (SAMS-N)

Inventor: LEE K S

Number of Countries: 002    Number of Patents: 003

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| DE 3731132 | A    | 19880324 | DE 3731132  | A    | 19870916 | 198813 B |
| US 4820952 | A    | 19890411 | US 8797628  | A    | 19870916 | 198917   |
| DE 3731132 | C    | 19890810 |             |      |          | 198932   |

Priority Applications (No Type Date): KR 8615012 A 19860930; KR 8614341 A  
19860916; KR 8614342 A 19860916

Patent Details:

| Patent No  | Kind | Lan | Pg | Main IPC | Filing Notes |
|------------|------|-----|----|----------|--------------|
| DE 3731132 | A    |     | 9  |          |              |
| US 4820952 | A    |     | 9  |          |              |

**Loudspeaker with foil diaphragm...**

**...has grooves on opposite frame edges for series-connected piezoelectric  
elements to increase frequency range**

...Abstract (Basic): The **loudspeaker** frame (1) has grooves (2) on  
opposite edges to retain several piezoelectric elements (3) in...

...ADVANTAGE - Better quality reproduction by **increasing** lower and middle  
range response, usually weakest in crystal type **loudspeakers** .

...Abstract (Equivalent): The **membrane** (5) of a piezoelectric **membrane  
loudspeaker** is rectangular ins hape with its sides clamped between  
front and rear parts (1,) of...

...Inwardly from the clamped edges, the **membrane** is bent into a V-shape  
(6), the pointed ends (12) being in cotnact with...

...the elements are holes (4) through the rear frame for radiation towards  
the rear, The **membrane** can be of transparent material. ADVANTAGE -  
Compact design with good quality **sound reproduction** .

(  
...Abstract (Equivalent): A film **speaker** has a film diaphragm for  
transducing mechanical vibrations into sound waves and a number of...

Title Terms: **LOUDSPEAKER** ;

...International Patent Class (Additional): **H04R-007/04** ...

... **H04R-017/00**

29/3,K/5      (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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004573418

WPI Acc No: 1986-076762/198612

XRPX Acc No: N86-056162

**HF loudspeaker range extension system - uses extra coil behind main coil assembly mounted in flat annular channel section**

Patent Assignee: SANDEN CORP (SAOE )

Inventor: HIRANO M

Number of Countries: 006 Number of Patents: 008

Patent Family:

| Patent No   | Kind | Date     | Applicat No | Kind | Date     | Week     |
|-------------|------|----------|-------------|------|----------|----------|
| DE 3527501  | A    | 19860313 | DE 3527501  | A    | 19850731 | 198612 B |
| FR 2569929  | A    | 19860307 |             |      |          | 198616   |
| GB 2165720  | A    | 19860416 | GB 8519349  | A    | 19850801 | 198616   |
| AU 8545644  | A    | 19860313 |             |      |          | 198618   |
| JP 61062298 | A    | 19860331 | JP 84184197 | A    | 19840903 | 198619   |
| US 4720868  | A    | 19880119 | US 85768341 | A    | 19850822 | 198805   |
| GB 2165720  | B    | 19880420 |             |      |          | 198816   |
| DE 3527501  | C    | 19910418 |             |      |          | 199116   |

Priority Applications (No Type Date): JP 856203 A 19850122; JP 84184197 A 19840903; JP 85U6203 U 19850122

Patent Details:

| Patent No  | Kind | Lan | Pg | Main IPC | Filing Notes |
|------------|------|-----|----|----------|--------------|
| DE 3527501 | A    |     | 29 |          |              |

**HF loudspeaker range extension system...**

...Abstract (Basic): The assembly consists of a standard **speaker** assembly (10) to which an additional coil (20) has been added. The assembly incorporates a...

...yoke (102,102b) surrounded by a permanent magnet (101). The moving coil (104) of the **loudspeakers** is wound on a cylindrical former (105) and is fed with the audio signal through...

...ADVANTAGE - Extra coil extends range of HF **loudspeakers** to as low as 150 Hz. (29pp Dwg.No.1/12)

...Abstract (Equivalent): magnet yoke and an air gap, an oscillation coil arranged in the air gap, a **membrane** for producing sound waves when the coil receives audio signals, and an additional oscillation system for producing oscillations in another **frequency** range and consisting of an additional coil for audio signals and mounted near the magnet...

...and the body is large in comparison with that of the oscillation coil and the **membrane**, so that the additional coil and the body reproduce oscillations smaller than about 250 Hz...

...USE/ADVANTAGE- The transducer is capable of **reproducing** oscillations or **sound** in a lower as well as a **higher** range and has a simple design. It is suitable for **loudspeakers**. (15pp)

...Title Terms: **LOUDSPEAKER** ;

International Patent Class (Additional): **H04R-001/24** ...

... **H04R-009/06**

**29/3,K/6 (Item 6 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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004026620

WPI Acc No: 1984-172162/198428

XRPX Acc No: N84-128334

**Modular loudspeaker unit for vehicle stereophonic sound equipment -  
uses double flat membrane unit between two HF units**

Patent Assignee: PHILIPS GLOEILAMPENFAB NV (PHIG )

Inventor: FIERENS G E M

Number of Countries: 008 Number of Patents: 009

Patent Family:

| Patent No   | Kind | Date     | Applicat No | Kind | Date     | Week   |   |
|-------------|------|----------|-------------|------|----------|--------|---|
| DE 3346584  | A    | 19840705 | DE 3346584  | A    | 19831223 | 198428 | B |
| GB 2133248  | A    | 19840718 | GB 8334335  | A    | 19831223 | 198429 |   |
| FR 2538985  | A    | 19840706 |             |      |          | 198432 |   |
| NL 8300011  | A    | 19840801 |             |      |          | 198434 |   |
| JP 59135995 | A    | 19840804 | JP 83252357 | A    | 19831229 | 198437 |   |
| CA 1211379  | A    | 19860916 |             |      |          | 198642 |   |
| GB 2133248  | B    | 19870225 |             |      |          | 198708 |   |
| US 4696037  | A    | 19870922 | US 83565309 | A    | 19831227 | 198740 |   |
| KR 8900105  | B    | 19890307 |             |      |          | 198933 |   |

Priority Applications (No Type Date): NL 8311 A 19830104

Patent Details:

| Patent No  | Kind | Lan | Pg | Main IPC | Filing Notes |
|------------|------|-----|----|----------|--------------|
| DE 3346584 | A    |     | 15 |          |              |

**Modular loudspeaker unit for vehicle stereophonic sound equipment...**

**...uses double flat membrane unit between two HF units**

**...Abstract (Basic): A loudspeaker arrangement comprising a first loudspeaker unit for reproducing a low-frequency audio signal and a second separate loudspeaker unit provided with a loudspeaker for reproducing a high-frequency audio signal, the two loudspeaker units either being constructed to have no rigid mechanical connection between them or being provided...**

**...permit detachment of the units from one another, and connecting means being provided whereby the loudspeaker units can be electrically connected to...**

**...be disengaged from one another to disconnect the units from one another, wherein the first loudspeaker unit comprises at least two flat diaphragms...**

**...The modular loudspeaker system includes a single central unit (1) incorporating two flat membrane loudspeakers (4,5) for low frequency reproduction, between two units (2,3) using conventional loudspeakers (8,9). Each outer structure incorporates a high and middle frequency loudspeaker. The outer units are connected to the central unit by connections (10) which enable them...**

**...the outer units can be positioned at positions remote from the central unit. The flat membranes are rectangular, and lie in the same plane. The modular unit can be adapted for incorporation in a common loudspeaker housing of conventional type and a single flat membrane can also be combined with a high and middle frequency supporting panel which can be tilted at a required angle...**

**...Abstract (Equivalent): A loudspeaker arrangement comprising a first loudspeaker unit for reproducing a low-frequency audio signal and a second separate loudspeaker unit provided with a loudspeaker for reproducing a high-frequency audio signal, the two loudspeaker units either being constructed to have no rigid mechanical connection between them or being provided...**



...permit detachment of the units from one another, and connecting means being provided whereby the **loudspeaker** units can be electrically connected to one another and which comprise interengageable parts that can be disengaged from one another to disconnect the units from one another, wherein the first **loudspeaker** unit comprises at least two flat diaphragms.

...Abstract (Equivalent): The **loudspeaker** comprises a first module with a **loudspeaker** unit for **reproducing** a low- **frequency** **audio** signal and provided with at least two flat diaphragms and a second module including a second **loudspeaker** unit for **reproducing** a high- **frequency** **audio** signal using a **loudspeaker** . The **loudspeaker** units are constructed either to be mechanically detached from one another or to have connecting...

...Connecting members allow the **loudspeaker** units to be electrically connected to one another and comprise interengageable parts that can be disengaged to disconnect the units. Another **loudspeaker** arrangement, which need not be of a modular construction, comprises a **loudspeaker** unit having at least one flat-diaphragm **loudspeaker** and a second **loudspeaker** unit which is pivotable about two orthogonal axes...

...Title Terms: **LOUDSPEAKER** ;

International Patent Class (Additional): **H04R-001/24** ...

... **H04R-005/02** ...

... **H04R-007/04**

?

File 348:EUROPEAN PATENTS 1978-2004/Oct W01

(c) 2004 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20041007,UT=20040930

(c) 2004 WIPO/Univentio

| Set | Items | Description  |
|-----|-------|--|
| S1  | 844   | (ELECTRO-ACOUSTIC OR ELECTROACOUSTIC) (3N) TRANSDUCER?   |
| S2  | 36436 | SPEAKER OR LOUDSPEAKER? OR (LOUD OR AUDIO) ( ) SPEAKER??   |
| S3  | 1110  | DIGITAL (3N) SOUND? (3N) SIGNAL?   |
| S4  | 1074  | ORIGINAL (3N) SIGNAL? (3N) (COPIES OR COPIED OR SAMPL?)  |
| S5  | 18    | S1 (3N) MEMBRANE?  |
| S6  | 58536 | (DOUBL? OR RAIS? OR HEIGHT? OR INCREAS? OR HIGHER) (3N) FREQ-<br>UENC?   |
| S7  | 3102  | (REDUC? OR COMPENSAT? OR CONTROL? OR MANAG? OR CHANG? OR A-<br>LTER? OR MODIF? OR ADJUST? OR CORRECT? OR MITIGAT?) (3N) (RUNAW-<br>AY? OR TRAIL? ( ) EFFECT? OR INERTIA) |
| S8  | 17716 | (SOUND OR AUDIO) (3N) (REPRODUC? OR RECORD?)   |
| S9  | 23    | FORMAT? (5N) S3  |
| S10 | 7680  | IC=H04R?   |
| S11 | 0     | S9 (S) S7  |
| S12 | 15    | S5 AND S10   |
| S13 | 0     | S12 NOT PY=1998:2004   |
| S14 | 0     | S5 (S) S6  |
| S15 | 0     | S4 (S) S5 (S) S7   |
| S16 | 7     | (S1 OR S2) (S) S7  |
| S17 | 7     | S16 NOT S12  |
| S18 | 1     | S17 AND S10  |
| S19 | 52    | S4 (S) S6  |
| S20 | 3     | S19 (S) S8   |
| S21 | 3     | S20 NOT (S16 OR S12)   |
| S22 | 0     | S4 (S) S9  |

12/3,K/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01764258

ELECTROACOUSTIC TRANSDUCER COMPRISING A MEMBRANE WITH A MIDDLE AREA  
COMPRISING STIFFENING GROOVES  
ELEKTROAKUSTISCHER WANDLER MIT EINER MEMBRAN WELCHE EINEN ZENTRALEN BEREICH  
MIT VERSTEIFUNGSNUTEN AUFWEIST  
TRANSDUCTEUR ELECTROACOUSTIQUE POURVU D'UNE MEMBRANE COMPRENANT UNE ZONE  
CENTRALE COMPORTANT DES RAINURES DE RENFORT  
PATENT ASSIGNEE:

Koninklijke Philips Electronics N.V., (200769), Groenewoudseweg 1, 5621  
BA Eindhoven, (NL), (Applicant designated States: all)

INVENTOR:

FRASL, Ewald, Triester Strasse 64, A-1101 Vienna, (AT)

PATENT (CC, No, Kind, Date):

WO 2004047487 040603

APPLICATION (CC, No, Date): EP 2003758542 031031; WO 2003IB4924 031031

PRIORITY (CC, No, Date): EP 2002102615 021121

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS: H04R-007/14

LANGUAGE (Publication,Procedural,Application): English; English; English

ELECTROACOUSTIC TRANSDUCER COMPRISING A MEMBRANE WITH A MIDDLE AREA  
COMPRISING STIFFENING GROOVES

INTERNATIONAL PATENT CLASS: H04R-007/14

12/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01558580

ELECTROACOUSTIC TRANSDUCER COMPRISING A MEMBRANE WITH AN IMPROVED  
PLEATS AREA  
ELEKTROAKUSTISCHER WANDLER MIT EINER MEMBRAN MIT EINEM VERBESSERTEN  
FALTENBEREICH  
TRANSDUCTEUR ELECTROACOUSTIQUE COMPRENANT UNE MEMBRANE A ZONE DE PLIS  
AMELIOREE

PATENT ASSIGNEE:

Koninklijke Philips Electronics N.V., (200769), Groenewoudseweg 1, 5621  
BA Eindhoven, (NL), (Applicant designated States: all)

INVENTOR:

FRASL, Ewald, Internationaal Octrooibureau B.V., Prof. Holstlaan 6,  
NL-5656 AA Eindhoven, (NL)

LEGAL REPRESENTATIVE:

Weber, Helmut et al (45463), Philips Intellectual Property & Standards,  
Triesterstrasse 64, 1101 Wien, (AT)

PATENT (CC, No, Kind, Date): EP 1413170 A2 040428 (Basic)

WO 2003009640 030130

APPLICATION (CC, No, Date): EP 2002743492 020626; WO 2002IB2672 020626

PRIORITY (CC, No, Date): EP 2001890211 010719

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: H04R-007/20

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

ELECTROACOUSTIC TRANSDUCER COMPRISING A MEMBRANE WITH AN IMPROVED  
PLEATS AREA

INTERNATIONAL PATENT CLASS: H04R-007/20

12/3,K/3 (Item 3 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01468426

METHOD FOR MANUFACTURING AN ELECTROACOUSTICAL TRANSDUCER COMPRISING A  
MEMBRANE CONFIGURATION

VERFAHREN ZUR HERSTELLUNG EINES ELEKTROAKUSTISCHEN WANDLERS MIT EINER  
MEMBRANKONFIGURATION

PROCEDE DE FABRICATION D'UN TRANSDUCTEUR ELECTRO-ACOUSTIQUE COMPRENANT UNE  
CONFIGURATION MEMBRANAIRE

PATENT ASSIGNEE:

Koninklijke Philips Electronics N.V., (200769), Groenewoudseweg 1, 5621  
BA Eindhoven, (NL), (Applicant designated States: all)

INVENTOR:

FRASL, Ewald, Prof. Holstlaan 6, NL-5656 AA Eindhoven, (NL)

LEGAL REPRESENTATIVE:

Weber, Helmut (45461), Internationaal Octrooibureau B.V., Prof. Holstlaan  
6, 5656 AA Eindhoven, (NL)

PATENT (CC, No, Kind, Date): EP 1366638 A2 031203 (Basic)

WO 2002065813 020822

APPLICATION (CC, No, Date): EP 2002715674 020131; WO 2002IB311 020131

PRIORITY (CC, No, Date): EP 2001890037 010213

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: H04R-031/00

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

METHOD FOR MANUFACTURING AN ELECTROACOUSTICAL TRANSDUCER COMPRISING A  
MEMBRANE CONFIGURATION

INTERNATIONAL PATENT CLASS: H04R-031/00

12/3,K/4 (Item 4 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01242071

METHOD FOR PRODUCING MEMBRANES FOR ELECTROACOUSTIC TRANSDUCERS AND  
MEMBRANES OBTAINED BY THIS METHOD

VERFAHREN ZUR HERSTELLUNG VON MEMBRANEN FUR ELEKTROAKUSTISCHE WANDLER SOWIE  
MEMBRANEN

PROCEDE DE FABRICATION DE MEMBRANES POUR TRANSDUCTEURS ELECTRO-ACOUSTIQUES  
ET MEMBRANES AINSI OBTENUES

PATENT ASSIGNEE:

Rohm GmbH & Co. KG, (203357), Kirschenallee, 64293 Darmstadt, (DE),  
(Proprietor designated states: all)

INVENTOR:

ROOSEN, Dirk, Sudetenstrasse 27, D-64572 Buttelborn, (DE)

MAIER, Leonhard, Leipziger Ring 425, D-63110 Nieder-Roden, (DE)

SEIBERT, Hermann, Trippstadter Strasse 8, D-67663 Kaiserslautern, (DE)  
PATENT (CC, No, Kind, Date): EP 1183904 A1 020306 (Basic)  
EP 1183904 B1 031022  
EP 1183904 B8 040107  
WO 2000076269 001214  
APPLICATION (CC, No, Date): EP 2000935105 000524; WO 2000EP4703 000524  
PRIORITY (CC, No, Date): DE 19925787 990605  
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE  
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI  
INTERNATIONAL PATENT CLASS: H04R-007/10 ; H04R-031/00 ; B32B-031/20  
NOTE:

No A-document published by EPO  
LANGUAGE (Publication,Procedural,Application): German; German; German  
FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS B                           | (English) | 200402 | 337        |
| CLAIMS B                           | (German)  | 200402 | 292        |
| CLAIMS B                           | (French)  | 200402 | 383        |
| SPEC B                             | (German)  | 200402 | 2720       |
| Total word count - document A      |           |        | 0          |
| Total word count - document B      |           |        | 3732       |
| Total word count - documents A + B |           |        | 3732       |

**METHOD FOR PRODUCING MEMBRANES FOR ELECTROACOUSTIC TRANSDUCERS AND  
MEMBRANES OBTAINED BY THIS METHOD**  
INTERNATIONAL PATENT CLASS: H04R-007/10 ...

... H04R-031/00

...CLAIMS B1

1. Process for producing a **membrane** for **electroacoustic transducers**, which comprises a core layer containing poly(meth)acrylimide foam, and at least one covering...

...a sandwich structure.

8. Membrane produced according to one of claims 1 to 7 for **electroacoustic transducers**, said **membrane** comprising a core layer containing poly(meth)acrylimide foam and at least one covering layer...

12/3,K/5 (Item 5 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00964981

**Electroacoustic transducer**

**Elektroakustischer Wandler**

**Transducteur electro-acoustique**

PATENT ASSIGNEE:

AKG Acoustics GmbH, (2505480), Lembockgasse 21-25, 1230 Wien, (AT),  
(Proprietor designated states: all)

INVENTOR:

Pavlovic, Gino, Dipl.Ing., Pochlarnstrasse 2/41, 1200 Wien, (AT)

LEGAL REPRESENTATIVE:

Patentanwalte BARGER, PISO & PARTNER (101281), Mahlerstrasse 9 Postfach  
96, 1015 Wien, (AT)

PATENT (CC, No, Kind, Date): EP 876079 A1 981104 (Basic)  
EP 876079 B1 011219

APPLICATION (CC, No, Date): EP 98890123 980429;

PRIORITY (CC, No, Date): AT 97755 970430  
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE  
INTERNATIONAL PATENT CLASS: H04R-009/04  
TRANSLATED ABSTRACT WORD COUNT: 101  
ABSTRACT WORD COUNT: 85  
NOTE:

Figure number on first page: 5

LANGUAGE (Publication,Procedural,Application): German; German; German  
FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (German)  | 199845 | 119        |
| CLAIMS B                           | (English) | 200151 | 195        |
| CLAIMS B                           | (German)  | 200151 | 174        |
| CLAIMS B                           | (French)  | 200151 | 221        |
| SPEC A                             | (German)  | 199845 | 1691       |
| SPEC B                             | (German)  | 200151 | 1752       |
| Total word count - document A      |           |        | 1810       |
| Total word count - document B      |           |        | 2342       |
| Total word count - documents A + B |           |        | 4152       |

INTERNATIONAL PATENT CLASS: H04R-009/04

...ABSTRACT Translated)

Electroacoustic transducer using electrodynamic principle

The **electroacoustic transducer** has a **membrane** (8) attached to a coil which is located within an annular gap between the poles...

12/3,K/6 (Item 6 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00891759

Method for producing a diaphragm for an electroacoustic transducer  
Verfahren zur Herstellung einer Membrane für einen elektroakustischen Wandler

Procede de fabrication d'un diaphragme pour transducteur electro-acoustique  
PATENT ASSIGNEE:

AKG Akustische u. Kino-Gerate Gesellschaft m.b.H., (248641), Lembockgasse  
21-25, A-1230 Wien, (AT), (Applicant designated States: all)

INVENTOR:

Pavlovic, Gino, Dipl.Ing., Pochlarnstrasse 2/41, 1200 Wien, (AT)

LEGAL REPRESENTATIVE:

Patentanwalte BARGER, PISO & PARTNER (101282), Mahlerstrasse 9 P. O. Box  
96, 1015 Wien, (AT)

PATENT (CC, No, Kind, Date): EP 814637 A2 971229 (Basic)  
EP 814637 A3 040915

APPLICATION (CC, No, Date): EP 97890105 970618;

PRIORITY (CC, No, Date): AT 961085 960619

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: H04R-031/00

TRANSLATED ABSTRACT WORD COUNT: 97

ABSTRACT WORD COUNT: 122

NOTE:

Figure number on first page: 3

LANGUAGE (Publication,Procedural,Application): German; German; German

FULLTEXT AVAILABILITY:

| Available Text                     | Language | Update | Word Count |
|------------------------------------|----------|--------|------------|
| CLAIMS A                           | (German) | 9712W3 | 154        |
| SPEC A                             | (German) | 9712W3 | 1321       |
| Total word count - document A      |          |        | 1475       |
| Total word count - document B      |          |        | 0          |
| Total word count - documents A + B |          |        | 1475       |

INTERNATIONAL PATENT CLASS: H04R-031/00

...ABSTRACT Translated)

**Membrane** manufacturing method for **electroacoustic transducer**

The **membrane** manufacture procedure provides areas of reduced thickness in a deformable thermoplastics material of constant thickness

...

...ABSTRACT A2

**Membrane** manufacturing method for **electroacoustic transducer**

The **membrane** manufacture procedure provides areas of reduced thickness in a deformable thermoplastics material of constant thickness

...

12/3,K/7 (Item 1 from file: 349)  
 DIALOG(R)File 349:PCT FULLTEXT  
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01124081 \*\*Image available\*\*

ELECTROACOUSTIC TRANSDUCER COMPRISING A MEMBRANE WITH A MIDDLE AREA  
 COMPRISING STIFFENING GROOVES  
 TRANSDUCTEUR ELECTROACOUSTIQUE POURVU D'UNE MEMBRANE COMPRENANT UNE ZONE  
 CENTRALE COMPORTANT DES RAINURES DE RENFORT

Patent Applicant/Assignee:

KONINKLIJKE PHILIPS ELECTRONICS N V, Groenewoudseweg 1, NL-5621 BA  
 Eindhoven, NL, NL (Residence), NL (Nationality), (For all designated  
 states except: US)

Patent Applicant/Inventor:

FRASL Ewald, Triester Strasse 64, A-1101 Vienna, AT, AT (Residence), AT  
 (Nationality), (Designated only for: US)

Legal Representative:

ROGGLA Harald (agent), Philips Intellectual Property & Standards,  
 Triester Strasse 64, A-1101 Vienna, AT,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200447487 A1 20040603 (WO 0447487)  
 Application: WO 2003IB4924 20031031 (PCT/WO IB03004924)  
 Priority Application: EP 2002102615 20021121

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
 prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
 EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
 LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC  
 SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
 (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
 SI SK TR  
 (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
 (AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
 (EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

transducer (1) is provided with membrane (20) as claimed in any...

12/3,K/8 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

01091111 \*\*Image available\*\*

**ELECTROACOUSTIC TRANSDUCER WITH BUILT IN TRANSDUCER CIRCUIT**  
**TRANSDUCTEUR ELECTROACOUSTIQUE EQUIPE D'UN CIRCUIT TRANSDUCTEUR INTEGRE**

Patent Applicant/Assignee:

KONINKLIJKE PHILIPS ELECTRONICS N V, Groenewoudseweg 1, NL-5621 BA  
Eindhoven, NL, NL (Residence), NL (Nationality), (For all designated  
states except: US)

Patent Applicant/Inventor:

KLEIN Erich, Triester Strasse 64, A-1101 Vienna, AT, AT (Residence), AT  
(Nationality), (Designated only for: US)  
SCHOEFFMANN Michael, Triester Strasse 64, A-1101 Vienna, AT, AT  
(Residence), AT (Nationality), (Designated only for: US)

Legal Representative:

WEBER Helmut (agent), Philips Intellectual Property & Standards, Triester  
Strasse 64, A-1101 Vienna, AT,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200414104 A2-A3 20040212 (WO 0414104)  
Application: WO 2003IB3275 20030718 (PCT/WO IB03003275)  
Priority Application: EP 2002102077 20020731

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD  
SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 3776

Main International Patent Class: H04R-003/00

International Patent Class: H04R-009/06

Fulltext Availability:

Claims

Claim

... 35) of the circuit frame (30) which second carrier surface (35) faces  
away from the membrane (8).

5 An electroacoustic transducer (1) as claimed in claim 5, wherein  
the circuit module (23) is of a design...

12/3,K/9 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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01058457 \*\*Image available\*\*

**NUMBER OF INDIVIDUAL RESONANCES FOR ACOUSTICS**



**PLURALITE DE RESONANCES PROPRES POUR L'ACOUSTIQUE**

Patent Applicant/Assignee:

ADVANCED TECHNOLOGY AUDIO ORGANISATION S A (ATAO), 10, rue de Vianden,  
L-2680 Luxembourg, LU, LU (Residence), LU (Nationality), (For all  
designated states except: US)

Patent Applicant/Inventor:

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(Residence), FR (Nationality), (Designated only for: US)  
LECOCQ Patrick, 11, rue d'Antroeuilles, F-59710 Ennevelin, FR, FR  
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Legal Representative:

POCHART Francois (et al) (agent), Cabinet Hirsch-Pochart, 34, rue de  
Bassano, F-75008 Paris, FR,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200388708 A1 20031023 (WO 0388708)  
Application: WO 2003FR1221 20030416 (PCT/WO FR0301221)  
Priority Application: FR 20024934 20020417

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE  
SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: French

Filing Language: French

Fulltext Word Count: 2268

Main International Patent Class: **H04R-007/12**

English Abstract

An **electroacoustic transducer membrane** (5) is provided with several  
individual resonators (1, 2, 4), fixed by gluing. The different...

12/3,K/10 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00979638 \*\*Image available\*\*

ELECTROACOUSTIC TRANSDUCER COMPRISING A MEMBRANE WITH AN IMPROVED  
PLEATS AREA  
TRANSDUCTEUR ELECTROACOUSTIQUE COMPRENANT UNE MEMBRANE A ZONE DE PLIS  
AMELIOREE

Patent Applicant/Assignee:

KONINKLIJKE PHILIPS ELECTRONICS N V, Groenewoudseweg 1, NL-5621 BA  
Eindhoven, NL, NL (Residence), NL (Nationality)

Inventor(s):

FRASL Ewald, Internationaal Octrooibureau B.V., Prof. Holstlaan 6,  
NL-5656 AA Eindhoven, NL,

Legal Representative:

WEBER Helmut (agent), Internationaal Octrooibureau B.V., Prof. Holstlaan  
6, NL-5656 AA Eindhoven, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200309640 A2-A3 20030130 (WO 0309640)  
Application: WO 2002IB2672 20020626 (PCT/WO IB0202672)

Priority Application: EP 2001890211 20010719  
Designated States:  
(Protection type is "patent" unless otherwise stated - for applications  
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CN JP  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 3301

ELECTROACOUSTIC        TRANSDUCER        COMPRISING A MEMBRANE WITH AN IMPROVED  
PLEATS AREA

Main International Patent Class: H04R-007/20

Fulltext Availability:  
Detailed Description  
Claims

English Abstract

An **electroacoustic transducer** (1) has a **membrane** (19), which has a  
membrane axis (5) and a ring-shaped pleats area (22), with...

Detailed Description

**Electroacoustic transducer** comprising a **membrane** with an improved  
pleats area The invention relates to an **electroacoustic transducer**  
with a **membrane** , with the membrane having a membrane axis and a  
ring-shaped pleats area in which a multitude of pleats is provided.

The invention also relates to a **membrane** for an **electroacoustic  
transducer** , with the **membrane** having a membrane axis and a ring-shaped  
pleats area in which a multitude of...transducer according to the  
invention may be characterized in the way described below, namely.

An **electroacoustic transducer** with a **membrane** , with the membrane  
has a  
membrane axis and a ring-shaped pleats area, with thenamely.

A **membrane** for an **electroacoustic transducer** , with the **membrane**  
having a  
membrane axis and a ring-shaped pleats area, with a multitude of pleats  
...

Claim

1 An **electroacoustic transducer** (1) with a **membrane** (19), with the  
membrane (19) having a membrane axis (5) and a ring...the adjacent  
linearly running pleat (32, 33, 34).

7 A membrane (19) for an **electroacoustic transducer** (1), with the  
**membrane** (19) having a membrane axis (5) and a ring-shaped pleats area  
(22), with...

12/3,K/11        (Item 5 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00931728        \*\*Image available\*\*

METHOD FOR MANUFACTURING AN ELECTROACOUSTICAL TRANSDUCER COMPRISING A  
MEMBRANE CONFIGURATION

PROCEDE DE FABRICATION D'UN TRANSDUCTEUR ELECTRO-ACOUSTIQUE COMPRENANT UNE  
CONFIGURATION MEMBRANAIRE

Patent Applicant/Assignee:

KONINKLIJKE PHILIPS ELECTRONICS N V, Groenewoudseweg 1, NL-5621 BA  
Eindhoven, NL, NL (Residence), NL (Nationality)

Inventor(s):

FRASL Ewald, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

Legal Representative:

WEBER Helmut (agent), Internationaal Octrooibureau B.V., Prof. Holstlaan  
6, NL-5656 AA Eindhoven, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200265813 A2-A3 20020822 (WO 0265813)

Application: WO 2002IB311 20020131 (PCT/WO IB0200311)

Priority Application: EP 2001890037 20010213

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

CN JP KR

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 5021

Main International Patent Class: H04R-031/00

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... stationary transducer part by means of the handling ring.

The invention also relates to a **membrane** configuration for an  
**electroacoustic** 1 5 **transducer** comprising a **membrane** and a handling  
ring for the membrane connected to the membrane.

A method with the...

...to the design given in the third paragraph above are also known, because  
such an **electroacoustic transducer** with such a **membrane**  
configuration has been supplied by the applicant to customers of the  
applicant and fitted by...

...placed with its area lying freely opposite the membrane on a stationary  
part of the **electroacoustic transducer**, whereupon the **membrane**  
configuration and the moving coil are attached to the stationary part of  
the transducer via...of manufacturing an electroacoustic transducer as  
well as an improved acoustic transducer and an improved **membrane**  
configuration for an **electroacoustic transducer**.

1 5 To achieve this object in a method according to the invention,  
features according...

...such that a membrane configuration according to the invention can be  
characterized as follows.

A **membrane** configuration for an **electroacoustic transducer**, which  
**membrane** configuration comprises a membrane and a handling ring for the  
membrane connected to the membrane...invention. In the method illustrated  
in Figs. 1 to 3 for the manufacture of an **electroacoustic transducer**,  
a **membrane** configuration is produced which 1 5 consists of a membrane  
and a handling ring for...

Claim

... surface (6) of the handling ring (1).

7 A membrane configuration (1 7) for an **electroacoustic transducer** (2 1), which **membrane** configuration (1 7) comprises a membrane (I 5) and a handling ring (1) for the...

12/3,K/12 (Item 6 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00931725 \*\*Image available\*\*

**ELECTROACOUSTIC TRANSDUCER BEING ACOUSTICAL TIGHT IN THE AREA OF ITS AIR GAP FOR ITS MOVING COIL**

**CAPTEUR ELECTROACOUSTIQUE ACOUSTIQUEMENT ETANCHE DANS LA REGION DE L'ENTREFER DE SA BOBINE MOBILE**

Patent Applicant/Assignee:

KONINKLIJKE PHILIPS ELECTRONICS N V, Groenewoudseweg 1, NL-5621 BA Eindhoven, NL, NL (Residence), NL (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

RENNER Heinz, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL, NL (Residence), AT (Nationality), (Designated only for: US)

Legal Representative:

WEBER Helmut (agent), Internationaal Octrooibureau B.V., Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200265810 A2-A3 20020822 (WO 0265810)

Application: WO 2002IB436 20020213 (PCT/WO IB0200436)

Priority Application: EP 2001890035 20010213

Designated States:

(Protection type is "patent" unless otherwise stated -for applications prior to 2004)

CN JP KR US

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 4317

Main International Patent Class: **H04R-009/02**

International Patent Class: **H04R-001/24** ...

... **H04R-009/10**

Fulltext Availability:

Detailed Description

Detailed Description

... the area of its air gap for its moving coil The invention relates to an **electroacoustic transducer** with a **transducer** axis and a **membrane**, with a magnet system with an external magnet system part and an internal magnet system...

12/3,K/13 (Item 7 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00859929 \*\*Image available\*\*

**TRANSDUCER WITH SEMICONDUCTING MEMBRANE**

**TRANSDUCTEUR A MEMBRANE SEMI-CONDUCTRICE  
WANDLER MIT HALBLEITENDER MEMBRAN**

Patent Applicant/Assignee:

SENNHEISER ELECTRONIC GMBH & CO KG, Am Labor 1, 30900 Wedemark, DE, DE  
(Residence), DE (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

NIEHOFF Wolfgang, Auf der Horst 9c, 30900 Wedemark, DE, DE (Residence),  
DE (Nationality), (Designated only for: US)

Legal Representative:

RABUS Werner W (agent), Eisenfuhr, Speiser & Partner, Martinistrasse 24,  
28195 Bremen, DE,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200193631 A2-A3 20011206 (WO 0193631)

Application: WO 2001EP5331 20010510 (PCT/WO EP0105331)

Priority Application: DE 10026474 20000527

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DK DM DZ EC  
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS  
LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: German

Filing Language: German

Fulltext Word Count: 2485

Main International Patent Class: H04R-023/00

International Patent Class: H04R-007/02

**English Abstract**

The invention relates to a transducer that is provided with a **membrane**,  
especially to an **electroacoustic transducer** with a **membrane** (4),  
such as particularly a microphone, a loudspeaker or a headset. The aim of  
the...

**12/3,K/14 (Item 8 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT

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00762840 \*\*Image available\*\*

**METHOD FOR PRODUCING MEMBRANES FOR ELECTROACOUSTIC TRANSDUCERS AND  
MEMBRANES OBTAINED BY THIS METHOD**

**PROCEDE DE FABRICATION DE MEMBRANES POUR TRANSDUCTEURS ELECTRO-ACOUSTIQUES  
ET MEMBRANES AINSI OBTENUES**

**VERFAHREN ZUR HERSTELLUNG VON MEMBRANEN FUR ELEKTROAKUSTISCHE WANDLER SOWIE  
MEMBRANEN**

Patent Applicant/Assignee:

ROHM GMBH, Kirschenallee, D-64293 Darmstadt, DE, DE (Residence), DE  
(Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

ROOSEN Dirk, Sudetenstrasse 27, D-64572 Buttelborn, DE, DE (Residence),  
DE (Nationality), (Designated only for: US)

MAIER Leonhard, Leipziger Ring 425, D-63110 Nieder-Roden, DE, DE  
(Residence), DE (Nationality), (Designated only for: US)

SEIBERT Hermann, Trippstadter Strasse 8, D-67663 Kaiserslautern, DE, DE

(Residence), DE (Nationality), (Designated only for: US )  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200076269 A1 20001214 (WO 0076269)  
Application: WO 2000EP4703 20000524 (PCT/WO EP0004703)  
Priority Application: DE 19925787 19990605

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DK EE ES FI GB GD GE GH  
GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN  
MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU  
ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: German

Filing Language: German

Fulltext Word Count: 4513

**METHOD FOR PRODUCING MEMBRANES FOR ELECTROACOUSTIC TRANSDUCERS AND  
MEMBRANES OBTAINED BY THIS METHOD**

Main International Patent Class: H04R-007/10

International Patent Class: H04R-031/00 ...

English Abstract

The invention relates to a method for producing a **membrane** for **electroacoustic transducers**, comprising a core layer (3) consisting of poly(meth)acrylimide foam and at least one...

12/3,K/15 (Item 9 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00458131 \*\*Image available\*\*

**ELECTRONIC APPLIANCE COMPRISING AN ELECTROACOUSTIC TRANSDUCER  
APPAREIL ELECTRONIQUE COMPRENANT UN TRANSDUCTEUR ELECTRO-ACOUSTIQUE**

Patent Applicant/Assignee:

MAXON SYSTEMS INC (LONDON) LTD,  
TAYLOR David,

Inventor(s):

TAYLOR David,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9848595 A1 19981029

Application: WO 97GB1114 19970422 (PCT/WO GB9701114)

Priority Application: WO 97GB1114 19970422

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

KR US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 2043

Main International Patent Class: H04R-001/02

Fulltext Availability:

Detailed Description

Detailed Description

... a collar of said electroacoustic

transducer. The collar forms or encompasses the edge of the  
membrane of the electroacoustic transducer . Depending on the  
actual shape and structure of the electroacoustic transducer,  
it is however also...for said electroacoustic transducer 12,  
More specifically, this acoustic chamber 24 is limited by the  
membrane 36 of the electroacoustic transducer 12 on the one  
side, by the part 22 of the casing 16 extending through...

?

18/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00957306 \*\*Image available\*\*

**ELECTROSTRICTIVE BENDING TRANSDUCER**  
**TRANSDUCTEUR EN FLEXION ELECTROSTRICTIF**

Patent Applicant/Assignee:

NEW TRANSDUCERS LIMITED, 37 Ixworth Place, London SW3 3QH, GB, GB  
(Residence), GB (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

BREAM Charles, New Transducers Limited, Cygnet House, Kingfisher Way,  
Hinchingsbrooke Business Park, Huntingdon, Cambridgeshire PE29 6FW, GB,  
GB (Residence), GB (Nationality), (Designated only for: US)

BANK Graham, New Transducers Limited, Cygnet House, Kingfisher Way,  
Hinchingsbrooke Business Park, Huntingdon, Cambridgeshire PE29 6FW, GB,  
GB (Residence), GB (Nationality), (Designated only for: US)

Legal Representative:

MAGUIRE Boss (agent), 5 Crown Street, St. Ives, Cambridgeshire PE27 5EB,  
GB,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200291492 A2-A3 20021114 (WO 0291492)  
Application: WO 2002GB2033 20020503 (PCT/WO GB0202033)  
Priority Application: GB 200111003 20010504

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 2168

International Patent Class: H04R-017/00

Fulltext Availability:

Detailed Description

Detailed Description

... actuator to be low so as  
to allow effective reproduction of bass tones by the  
**loudspeaker** . In accordance with conventional bending  
theory, this is achieved by **reducing** the moment of  
**inertia** (also known as the

?



21/3,K/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01026375

**METHOD AND APPARATUS FOR FORMATTING THE DIGITAL AUDIO SIGNAL FOR USE OF THE  
SOUND REPRODUCTION**

**VERFAHREN UND VORRICHTUNG ZUR FORMATIERUNG VON NUMERISCHEN TONSIGNALEN ZUR  
ANWENDUNG BEI TONWIEDERGABE**

**PROCEDE ET APPAREIL POUR FORMATER LE SIGNAL AUDIO NUMERIQUE POUR L'USAGE DE  
LA REPRODUCTION SONORE**

**PATENT ASSIGNEE:**

Perrichon, Claude Annie, (1408891), 6, rue des Escoffiers, 38080 L'Isle  
d'Abeau, (FR), (Proprietor designated states: all)  
Charbonneaux, Marc, (2490110), 6, rue Dumenge, 69004 Lyon, (FR),  
(Proprietor designated states: all)  
Piccaluga, Pierre, (1044613), 6, rue des Escoffiers, 38080 L'Isle d'Abeau  
, (FR), (Proprietor designated states: all)

**INVENTOR:**

PICCALUGA, Pierre, 6, rue des Escoffiers, F-38080 L'Isle d'Abeau, (FR)

**LEGAL REPRESENTATIVE:**

Cabinet Hirsch (101611), 34, Rue de Bassano, 75008 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 995336 A1 000426 (Basic)

EP 995336 B1 011219

WO 9903303 990121

APPLICATION (CC, No, Date): EP 98935101 980706; WO 98FR1437 980706

PRIORITY (CC, No, Date): FR 978822 970707

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: H04R-003/04

**NOTE:**

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): French; French; French

**FULLTEXT AVAILABILITY:**

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS B                           | (English) | 200151 | 274        |
| CLAIMS B                           | (German)  | 200151 | 259        |
| CLAIMS B                           | (French)  | 200151 | 273        |
| SPEC B                             | (French)  | 200151 | 1307       |
| Total word count - document A      |           |        | 0          |
| Total word count - document B      |           |        | 2113       |
| Total word count - documents A + B |           |        | 2113       |

...CLAIMS terminals of at least one electro-acoustic transducer from an  
original signal of a digital **recorder** or a digital **sound** medium  
into a new digital sound audio **signal** whose **original** signals are  
**copied** and reproduced at **higher frequencies** created by specific  
samplers for each of the copied signals, characterised in that the  
phase...

21/3,K/2 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00390620 \*\*Image available\*\*

**PC AUDIO SYSTEM WITH FREQUENCY COMPENSATED WAVETABLE DATA**

**SYSTEME AUDIO DE MICRO-ORDINATEUR A COMPENSATION EN FREQUENCE DES DONNEES  
DE TABLEAUX D'ONDES**

Patent Applicant/Assignee:

ADVANCED MICRO DEVICES INC,  
Inventor(s):  
HEWITT Larry,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 9731363 A1 19970828  
Application: WO 97US2811 19970221 (PCT/WO US9702811)  
Priority Application: US 96604558 19960221  
Designated States:  
(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)  
JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
Publication Language: English  
Fulltext Word Count: 6788  
  
Fulltext Availability:  
Detailed Description

Detailed Description

... samples at the same frequency as the sampling frequency used during  
analog-to-digital conversion ( **recording** ) of the original **audio**  
signal, then when the audio signals generated by the DSP are converted to  
analog and...

...resulting audio signal will sound the same (i.e., have the same  
frequency) as the **original** audio **signal** used to create the data  
**samples** . When the frequency of the audio signal being played is the same  
as the recording...

...will have a higher pitch. For  $F_s = 4$ , the generated audio signal is two  
octaves **higher** than the sampling **frequency** of the signal recorded.

If  $F_0 = I$  for each of the active voices, then the...

21/3,K/3 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00336483 \*\*Image available\*\*

PC AUDIO SYSTEM WITH WAVETABLE CACHE

SYSTEME AUDIO POUR MICRO-ORDINATEUR A TABLEAU DE SIGNAUX  
ANALOGIQUES

Patent Applicant/Assignee:

ADVANCED MICRO DEVICES INC,

Inventor(s):

HEWITT Larry,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9618995 A1 19960620

Application: WO 95US14347 19951102 (PCT/WO US9514347)

Priority Application: US 94354337 19941212; US 94356753 19941215; US  
94363485 19941223; US 95511085 19950804; US 95511124 19950804; US  
95511421 19950804; US 95511427 19950804

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

JP KR AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 8764

Fulltext Availability:

Detailed Description

#### Detailed Description

... samples at the same frequency as the sampling frequency used during analog-to-digital conversion ( **recording** ) of the original **audio** signal, then when the audio signals generated by the DSP are converted to analog and...

...resulting audio signal will sound the same (i.e., have the same frequency) as the **original** audio **signal** used to create the data **samples** . When the frequency of the audio signal being played is the same as the recording generated audio signal is two octaves **higher** than the sampling **frequency** of the signal recorded.

If  $F_v = 1$  for each of the active voices, then the...

?

File 9:Business & Industry(R) Jul/1994-2004/Oct 12  
(c) 2004 The Gale Group  
File 15:ABI/Inform(R) 1971-2004/Oct 13  
(c) 2004 ProQuest Info&Learning  
File 16:Gale Group PROMT(R) 1990-2004/Oct 13  
(c) 2004 The Gale Group  
File 20:Dialog Global Reporter 1997-2004/Oct 13  
(c) 2004 The Dialog Corp.  
File 47:Gale Group Magazine DB(TM) 1959-2004/Oct 13  
(c) 2004 The Gale group  
File 75:TGG Management Contents(R) 86-2004/Oct W1  
(c) 2004 The Gale Group  
File 80:TGG Aerospace/Def.Mkts(R) 1986-2004/Oct 13  
(c) 2004 The Gale Group  
File 88:Gale Group Business A.R.T.S. 1976-2004/Oct 12  
(c) 2004 The Gale Group  
File 98:General Sci Abs/Full-Text 1984-2004/Aug  
(c) 2004 The HW Wilson Co.  
File 112:UBM Industry News 1998-2004/Jan 27  
(c) 2004 United Business Media  
File 141:Readers Guide 1983-2004/Aug  
(c) 2004 The HW Wilson Co  
File 148:Gale Group Trade & Industry DB 1976-2004/Oct 12  
(c)2004 The Gale Group  
File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group  
File 275:Gale Group Computer DB(TM) 1983-2004/Oct 13  
(c) 2004 The Gale Group  
File 264:DIALOG Defense Newsletters 1989-2004/Oct 13  
(c) 2004 The Dialog Corp.  
File 484:Periodical Abs Plustext 1986-2004/Oct W2  
(c) 2004 ProQuest  
File 553:Wilson Bus. Abs. FullText 1982-2004/Aug  
(c) 2004 The HW Wilson Co  
File 570:Gale Group MARS(R) 1984-2004/Oct 13  
(c) 2004 The Gale Group  
File 608:KR/T Bus.News. 1992-2004/Oct 13  
(c)2004 Knight Ridder/Tribune Bus News  
File 620:EIU:Viewswire 2004/Oct 07  
(c) 2004 Economist Intelligence Unit  
File 613:PR Newswire 1999-2004/Oct 13  
(c) 2004 PR Newswire Association Inc  
File 621:Gale Group New Prod.Annou.(R) 1985-2004/Oct 13  
(c) 2004 The Gale Group  
File 623:Business Week 1985-2004/Oct 12  
(c) 2004 The McGraw-Hill Companies Inc  
File 624:McGraw-Hill Publications 1985-2004/Oct 12  
(c) 2004 McGraw-Hill Co. Inc  
File 634:San Jose Mercury Jun 1985-2004/Oct 12  
(c) 2004 San Jose Mercury News  
File 635:Business Dateline(R) 1985-2004/Oct 13  
(c) 2004 ProQuest Info&Learning  
File 636:Gale Group Newsletter DB(TM) 1987-2004/Oct 13  
(c) 2004 The Gale Group  
File 647:CMP Computer Fulltext 1988-2004/Oct W1  
(c) 2004 CMP Media, LLC  
File 696:DIALOG Telecom. Newsletters 1995-2004/Oct 12  
(c) 2004 The Dialog Corp.  
File 674:Computer News Fulltext 1989-2004/Sep W1  
(c) 2004 IDG Communications  
File 810:Business Wire 1986-1999/Feb 28

(c) 1999 Business Wire  
 File 813:PR Newswire 1987-1999/Apr 30  
 (c) 1999 PR Newswire Association Inc  
 File 587:Jane's Defense&Aerospace 2004/Aug W5  
 (c) 2004 Jane's Information Group

| Set | Items  | Description  |
|-----|--------|--|
| S1  | 92     | (ELECTRO-ACOUSTIC OR ELECTROACOUSTIC) (3N) TRANSDUCER?   |
| S2  | 793256 | SPEAKER OR LOUDSPEAKER? OR (LOUD OR AUDIO) ( ) SPEAKER??   |
| S3  | 3155   | DIGITAL (3N) SOUND? (3N) SIGNAL?   |
| S4  | 148    | ORIGINAL (3N) SIGNAL? (3N) (COPIES OR COPIED OR SAMPL?)  |
| S5  | 0      | S1 (3N) MEMBRANE?  |
| S6  | 121240 | (DOUBL? OR RAIS? OR HEIGHT? OR INCREAS? OR HIGHER) (3N) FREQ-<br>UENC?   |
| S7  | 7863   | (REDUC? OR COMPENSAT? OR CONTROL? OR MANAG? OR CHANG? OR A-<br>LTER? OR MODIF? OR ADJUST? OR CORRECT? OR MITIGAT?) (3N) (RUNAW-<br>AY? OR TRAIL? ( ) EFFECT? OR INERTIA) |
| S8  | 522773 | (SOUND OR AUDIO) (3N) (REPRODUC? OR RECORD?)   |
| S9  | 35     | FORMAT? (5N) S3  |
| S10 | 0      | S9 (S) S6  |
| S11 | 0      | S9 (S) S7  |
| S12 | 190    | (S1 OR S2) (S) S3  |
| S13 | 14     | S12 (S) FORMAT?  |
| S14 | 8      | RD S13 (unique items)  |
| S15 | 0      | S7 (S) S8  |
| S16 | 0      | S4 (S) S6  |
| S17 | 0      | S12 (S) S7   |
| S18 | 0      | AU=(PICCALUGA, P? OR PICCALUGA P?)   |

14/3,K/1 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

10694665 Supplier Number: 107276672 (USE FORMAT 7 FOR FULLTEXT)  
**Software radio.(Prototype: straight from the lab: technology's first draft)(Brief Article)**  
Technology Review (Cambridge, Mass.), v106, n7, p19(1)  
Sept, 2003  
Language: English Record Type: Fulltext  
Article Type: Brief Article  
Document Type: Magazine/Journal; Trade  
Word Count: 197

... hardware, plus electronics that convert signals into digital representations. Vanu's software then decodes the **digital signals** and sends **sound** output to the iPaq's builtin **speaker**. In reverse, transmissions are encoded into a digital waveform particular to the desired **format** and sent to the radio hardware for transmission. Adding a new **format** requires only a software upgrade. The company hopes to commercialize the software for use by...

14/3,K/2 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

08498773 Supplier Number: 72951139 (USE FORMAT 7 FOR FULLTEXT)  
**Iwerks Entertainment Installs Large Format Theater at San Diego Natural History Museum.**  
Business Wire, p0299  
April 9, 2001  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 744

... of-the-art show control.  
This theater is the first installation of Iwerks' upgraded Large **Format** theater package, notable for simplified installation, fewer connections and mechanical parts, and streamlined **sound** and show control components.  
" **Digital signal** processing technology has enabled us to reduce the number of equipment racks needed for Iwerks...

14/3,K/3 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

04585200 Supplier Number: 46741140 (USE FORMAT 7 FOR FULLTEXT)  
**Toshiba Introduces its First DVD-Video Player in Japan**  
News Release, pN/A  
Sept 26, 1996  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 1026

(USE FORMAT 7 FOR FULLTEXT)  
TEXT:  
...of soundtrack and subtitles, Multi-aspect to optimize picture

reproduction in accordance with the screen **format** of the TV to which the player is connected, Multi-angle viewing, and Multi-story...

...the DVD player to a TV. And, by connecting Dolby digital bitstream output to the **speaker** via the amplifier with Dolby Digital (AC-3) decoder, realistic audio ambiance by Dolby Digital...

...The large capacity of 4.7 gigabytes achieves long storage time. with superior image and **sound** quality. By using MPEG2 high-quality **digital signal** image compression technology, a disc with the large capacity of 4.7 gigabytes can store...

...high-quality images. With a 4:3 TV, squeezed images are reproduced in Letter-box **format** or Pan & Scan. With Letter-box, wide-aspect images are displayed on a 4:3...Pan & Scan, some portions of wide-aspect images are deleted to fit a 4:3 **format**. 4. Multi-story function Multi-story function allows users to select the story development in...

14/3,K/4 (Item 1 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2004 The Dialog Corp. All rts..reserv.

35138120  
Sony broadens Super Audio-CD offerings with dedicated changer and compatible DVD Dream Systems  
CANADA NEWSWIRE  
April 20, 2004  
JOURNAL CODE: WCNW LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 664

... TM) (Digital Infrared Audio Transmission System) technology, enabling wireless rear speakers. This sophisticated technology transfers **digital** audio **signals** without compression or compromise to **sound** quality. The new model incorporates two S-Master digital amplifiers and two new Dual Digital...

14/3,K/5 (Item 2 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2004 The Dialog Corp. All rts. reserv.

29652939  
Treat Yourself, Visually  
FINANCIAL EXPRESS  
June 14, 2003  
JOURNAL CODE: WFEX LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 1570

... DVD player provides crystal clear digital video pictures even with the component or super video **signal**. Add to this, the **sound** quality of **Digital** Audio Sound Track including DTS along with 5.1 Channel Digital Dolby for an out...

14/3,K/6 (Item 1 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.

05829964 SUPPLIER NUMBER: 63059110 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**INDUSTRY RESOURCES.**

Entertainment Design, 34, 6, 3

June, 2000

ISSN: 1520-5150

LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 36203

LINE COUNT: 11269

... Richard Godinez/Stephen Hendee  
Manufacturer of tube-based compressors, equalizers, microphone  
preamplifiers, and recording channels; **digital signal** processors;  
time alignment delays, crossovers and graphic equalizers; and  
power amplifiers.

ARABESQUE SOFTWARE AND CONSULTING...and digital  
processing equipment for recording studios  
and broadcasting applications, and in fixed and  
live **sound** applications. In the US, the distributor  
is Transamerica Audio Group. The company is  
located in...

14/3,K/7 (Item 1 from file: 608)

DIALOG(R)File 608:KR/T Bus.News.

(c)2004 Knight Ridder/Tribune Bus News. All rts. reserv.

06648370 (USE FORMAT 7 OR 9 FOR FULLTEXT)

(B) **OPINION: Freedom Struck Out when Americans Played Baseball in Cuba**

March 31, 1999

DOCUMENT TYPE: NEWSPAPER

RECORD TYPE: FULLTEXT

LANGUAGE: ENGLISH

WORD COUNT: 916

...TEXT: by Fidel Castro's regime.  
Sen. Patrick Leahy said the March 28 matchup (to be **followed** by one in  
Baltimore) should precipitate a review of American policy toward Cuba. The  
game sent a **signal** that "the majority of **the** people of the two  
countries have no animosity toward each other," the Vermont Democrat said  
...

...League Baseball Commissioner Bud Selig.  
With the game televised on Cuban television and the ESPN **network** in the  
United States, Castro was able to sanitize his image before millions  
without making...

...be seen.  
But several points are already clear. Castro appeared to many Americans as  
an **unfairly** maligned dictator. And, despite denials to the contrary,  
baseball has become a diplomatic instrument.  
BASEBALL...

...their government's policies because of Leahy's pronouncement? Will  
Castro liberalize his views because **of** baseball diplomacy?  
WHEN THE Orioles scored in the 11th inning, ending the game, fans stood...

14/3,K/8 (Item 1 from file: 635)

DIALOG(R)File 635:Business Dateline(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

2463334 437575571

**HIGH TECH All Stars: Vanu Bose, Practicing wireless 'black magic'**  
Dinan, Elizabeth



Mass High Tech v21n43 pS8  
Oct 27, 2003  
WORD COUNT: 724  
DATELINE: Massachusetts

TEXT:

...to transmit walkie-talkie and digital police-band signals. The signals are converted into digital **format** before Bose's software decodes the **digital signals** and sends **sound** through the iPaq's **speaker**. The process works in reverse and Vanu Inc. plans to market it to police and...  
?